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ABSTRACT

Designed to describe the condition of vocational education from both an institutional and student perspective, this report examines vocational education within the context of the formal education system and related institutions. A total of 40 charts and 166 tables reflect data collected primarily from the 1978 calendar year and the 1978-79 school year. Data are organized into the following subject areas: institutional providers of vocational education, enrollment in vocational education, profiles of vocational students, vocational education facilities, vocational education staff, allocations and expenditures for vocational education, student choice of program, costs facing vocational students, and outcomes of vocational education. (MN)

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The Condition of Vocational Education

Mary A. Golladay
and
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Highlights

- Of the 28,000 identified institutional providers of vocational education over 16,000 are secondary schools.
- Of the nearly 20 million persons enrolled in vocational education, almost two-thirds are in secondary vocational education programs.
- Of the 7.6 million enrollments in vocational education, 4.5 million enrollments were in occupationally specific programs.
- One-third of America's 4-year colleges provide vocational training.
- Two-year institutions of higher education account for over two-thirds of postsecondary enrollments in vocational education.
- Over half of the enrollments in postsecondary programs are in programs of less than 500 hours.
- Since 1972, instructional staff increased 50 percent (from 236,000 to 354,000).
- While Federal support for vocational education programs has increased slightly from 1972 to 1979, State and local funding has doubled.
- The completion status for 11th and 12th grade students showed that over 45 percent completed their program.

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Administrator

National Center for Education Statistics

"The purpose of the Center shall be to collect and disseminate statistics and other data related to education in the United States and in other nations. The Center shall . . . collect, collate, and, from time to time, report full and complete statistics on the conditions of education in the United States; conduct and publish reports on specialized analyses of the meaning and significance of such statistics; . . . and review and report on education activities in foreign countries."--Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1).

Division of Statistical Services
Forms Management & Publications Branch
Thomas Hill, Editor

Foreword

This report presents comprehensive statistics describing the condition of vocational education. It contains final data for the 1978-79 school year collected by the National Center for Education Statistics (NCES) through the newly instituted Vocational Education Data System (VEDS), mandated by Congress in the Education Amendments of 1976. It includes, also, data from several other sources both within and outside of NCES. This statistical report supplements NCES congressional testimony on vocational education presented on September 17, 1980. The report describes many aspects of vocational education, examining its providers, offerings, students, facilities, instructional staff and finances. It also presents the student perspective, documenting students' interests in obtaining vocational education, the problems they encounter, and the outcomes they achieve.

To facilitate the use of this report as a reference document, the tables are grouped together at the end of each chapter of text. The charts are integrated into the text; each chart contains a reference to the table from which it was derived. Finally, since two different groups of programs are discussed in this report -- those receiving Federal funds under the provisions of the Vocational Education Act, as amended, and all programs, regardless of funding -- the designation (VEA) is included in the title of those tables which refer only to Federally assisted programs.

Marie D. Eldridge
Administrator
National Center for
Education Statistics
July 1981

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The project staff of the Vocational Education Data System have been major contributors to this report. Robert Morgan, Project Director, and David B. Orr, Chief, Systems Design and Analysis Branch, were helpful in numerous ways, providing support and coordination with ongoing VEDS project activities. The assembly of final VEDS data for inclusion in this report was the responsibility of Nicholas Osso. Ellease Dill reviewed several portions of this manuscript and gave a comprehensive review of an earlier version of the report. Judy Loren provided extensive programming support for the production of final tables.

In compiling the information presented here, the authors were greatly assisted also by members of a specially constituted analysis task force. Jane Crane compiled data from the data bases on noncollegiate postsecondary schools and students, and shared responsibility for assembling the data on finance and preparing the related text. Nicholas Osso was jointly responsible for the finance section, and also served as the liaison to the permanent staff of the Vocational Education Data System (VEDS), coordinating work on VEDS data with the survey contractor, NCES staff, and the analysis team. Jeffrey Owings compiled data from the National Longitudinal Study and High School and Beyond. John Dusatko coordinated the many support services offered by the Data Systems Branch from Paul Dunn, Samuel Barbett, and others. Others supplying data included Ruth Boaz, Evelyn Kay, Larry Suter, and Valena White Plisko, all of NCES, and Richard Carlson of the Office of Adult and Vocational Education. Reviews of an earlier version of the report were given by Marjorie Chandler, NCES, and Kent Bennion of the Office of Vocational and Adult Education.

Typing of many versions of the manuscript and providing clerical support to the analysis task force was the responsibility of Marilyn Snyder. Tables were typed by Judy Shumate. Typing services were also provided by Denise Wood and Josie Shell. The manuscript was edited by Thomas Hill.

The authors wish to extend their appreciation for the support of these and many other NCES staff members who assisted in numerous ways.

How to Obtain More Information

Information about the Center's statistical program and a catalog of NCES publications may be obtained from the Statistical Information Office, National Center for Education Statistics (Presidential Building), 400 Maryland Avenue, S.W., Washington, D.C. 20202, telephone (301) 436-7900.

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Chapter 1

A Context for Examining the Condition of Vocational Education

Vocational education is an integral part of American education. Intended to prepare persons for entry into occupations, its goals are consistent with the more generally stated aims of formal education to prepare persons for meaningful and productive lives. Vocational education both complements and builds upon the basic and applied skills emphasized in the early years of formal schooling. This report examines vocational education within the context of the formal education system and related institutions. It describes the condition of vocational education from the standpoint of the receivers as well as the providers. The ability of the network of vocational education opportunities to meet its demanding goals is assessed. In particular, the successes of that network in meeting the needs of a diverse clientele are studied.

The report utilizes data compiled from many sources. It portrays the offerings of vocational education, examines the characteristics of those providing it, and tests, where possible, the effectiveness of the results. The resulting compilation of information is, as a consequence, less precise than one might wish. The amount of information assembled here is considerable, including some which is highly specific and some which is regretably general in detail. In an attempt to be comprehensive the report also has had to be eclectic. Hence, the resulting portrait of vocational education is better described as a mosaic than as a photograph.

Compiling an assessment of the condition of vocational education has proven to be a highly effective device for bringing into focus the need for information and for identifying topics or areas where the quality of data, from either recent or from earlier established sources, hinders presentation or understanding. The report thus also considers the quality of data describing vocational education. Specific problems are discussed in the context of on-going data systems and the development over time of reliable data bases for continued analyses.

Federal Support for Vocational Education

Vocational education has a firmly established position in the American educational system. From the outset, school curriculums were formulated to ensure that they provided the basic skills necessary for effective citizenship and economic productivity. At the early levels in particular, practical examples furnished the standard of acceptable performance.

As the educational system itself grew to accommodate society's changing needs for trained manpower, the integral role of vocational education became more readily apparent. At the Federal level, the importance of vocational education was expressed with the passage of the Smith-Hughes Act of 1917. As one of the early programs of aid to States for the purpose of education, the Act made possible the provision of vocational education through support of facilities and programs. The Act is regarded now as a landmark step in the support of education. It both affirmed the value of vocational education and established a program of Federal support to meet particular educational objectives.

Recent Federal efforts to support vocational education date from 1963. At that time, the passage of the Vocational Education Act initiated efforts to expand and improve vocational education. The Act contained many provisions: It created a permanent authority for Federal assistance to the States to fund types of job training for youth and adults through the schools; it required that nationally funded research explore experimental and developmental programs; and it provided funds for the construction of area vocational schools and for work study programs.

Amendments to the Vocational Education Act in 1968 gave States greater flexibility in offering broad training programs by removing matching provisions. States were encouraged to improve the evaluation of job training and to increase coordination with Federal and State job training programs. Funding was provided for exemplary projects, cooperative education, curriculum development, and special programs for the disadvantaged and handicapped. Support for construction of area vocational schools and for work-study programs was continued. State Advisory Councils on Vocational Education were created.

The Education Amendments of 1974 authorized States to provide programs for youths and adults needing bilingual vocational training. The Education Amendments of 1976, while continuing support for many of these programs, also articulated a specific need for improved planning and for the capability of regularly assessing both the successes of vocational education and the relationship between offerings and manpower needs. These amendments established a national vocational education data reporting and accounting system. This report presents the first data to be collected through the newly mandated system.

Scope of Report

This report describes vocational education from both an institutional and a student perspective. The institutional characteristics are presented from the standpoint of providers of vocational education, including many outside the formal educational system that nonetheless meet the primary vocational education requirement. The information presented on providers represents a comprehensive attempt to identify and describe all institutions that could be classified as offering vocational education regardless of whether those institutions receive Federal support under the provisions of the Vocational Education Act, as amended. Programs providing work-related training that are offered by employers or associations are excluded.

The institutional perspective provides data on enrollments and student characteristics, facilities and staff of provider institutions; and on financing of programs under the jurisdiction of State Boards of Vocational Education. Data sources utilized to present the institutional perspective include several of the ongoing surveys of the National Center for Education Statistics, including the newly instituted Vocational Education Data System (VEDS) as well as the Higher Education General Information Survey and the Survey of Noncollegiate Postsecondary Schools with Occupational Programs; special surveys by the Office for Civil Rights and the National Institute of Education; program information compiled by the Bureau of Occupational and Adult Education, of the former U.S. Office of Education; and special studies conducted by the Office of Planning and Evaluation, also of the former U.S. Office of Education.

The student perspective is addressed with information assembled to illuminate the goals of vocational education students, the constraints they confront, and their satisfaction with their training. Data sources include many of the surveys cited earlier, plus the National Longitudinal Study of the High School Class of 1972 and High School and Beyond, both longitudinal surveys of NCES. Considerable attitudinal and option data are presented.

Outcomes of vocational education are addressed from both the institutional and student perspectives. Longitudinal data tracking students through education and work experience are supplemented by labor market profiles and data on job satisfaction. Data sources in addition to those already mentioned include the Bureau of Labor Statistics.

Data are presented for the calendar year 1978 or the school year 1978-79, whenever possible. While this designation was possible for ongoing surveys, several of the special studies cited here were for earlier or later periods. Their inclusion was based on the judgment that they offered information either general enough to be of lasting value or important enough to merit inclusion despite a departure from the selected point in time.

Chapter 2

Institutional Providers of Vocational Education

Vocational education is offered in many settings. While historically the single largest provider has been the traditional educational system providing instruction at the secondary level, other educational institutions offering general or academic instruction are major providers also. Postsecondary institutions are particularly important in considering how successfully vocational education provides specific skills for job entry. In addition, a number of institutions outside of the traditional, formal educational system exist for the express intent of providing job skills, in many cases in highly specialized fields or occupational areas. Further, the provisions of the Federal Vocational Education Act, as amended, supported the construction of special facilities providing vocational education. Not only has access to a variety of training opportunities been enhanced by this support, the diversity of types of institutions providing vocational training also has been increased.

This report examines only those vocational education programs offered within the institutional settings cited here. There are, in addition, specific instructional programs offered to employees by employers and sponsored by labor unions and by various fraternal or social organizations. While many of these programs are of considerable magnitude, both in the number of persons served and in the variety and quality of instruction offered, these various training efforts are outside the scope of this report. This report offers the most comprehensive picture possible of vocational education as it is offered by the institutions within or analogous to the traditional educational system.

To portray vocational education in its many settings has required the definition and description of a mosaic of institutions. The components of the picture of providers include secondary and postsecondary institutions. Several data sources had to be utilized. As a result, the identification and description of the institutions has required in some instances the use of general terms that mask many significant, even fundamental, differencs in institutional intent or character. Nonetheless, to provide the mandatory framework for the statistical description of vocational education, the following institutional categories have been used:

Secondary Institutions

Comprehensive High School — A comprehensive high school is a general high school offering progams in **both** vocational and general academic subjects, but in which the majority of the students are **not** enrolled in programs of vocational education.

Vocational High School — A vocational high school is a specialized secondary school that offers a **full-time** program of study in both academic and vocational subjects and in which all or a majority of the students are enrolled in vocational education programs.

Area Vocational Center — An area vocational center is a shared-time facility that provides instruction **only** in vocational education to students from throughout a school system or region. Students attending an area vocational center receive the academic portion of their education program in regular high schools or other institutions.

Postsecondary Institutions

Four-Year Institutions of Higher Education — A 4-year institution of higher education is an institution legally authorized to offer and offering at least a 4-year program of college-level studies wholly or principally creditable toward a baccalaureate degree, either accredited or preaccredited by an agency recognized for such purpose by the U.S. Department of Education, and meeting the related requirements necessary for inclusion in the *Education Directory: Colleges and Universities.*

Two-Year Institutions of Higher Education — A 2-year institution of higher education is an institution legally authorized to offer and offering at least a 2-year program of college-level studies which terminates in an associate degree or is principally creditable toward a baccalaureate degree and meets accrediting and related requirements necessary for inclusion in the *Education Directory: Colleges and Universities.* This group includes institutions frequently identified as community colleges, offering both general and vocational-technical education, and some technical institutes, offering instruction primarily in vocational and technical education provided they meet the general criteria specified above.

Noncollegiate Postsecondary Schools — A noncollegiate postsecondary school is a non-degree granting institution (or an institution offering a degree that is not recognized as a collegiate degree by the appropriate regional accrediting commission) offering instruction in vocational and technical education only, and whose educational programs are terminal in nature. Such institutions generally have no provision for the development of transfer programs to either 2-year or to 4-year institutions of higher education. This group includes area vocational schools and schools offering specialized instruction for preparation for a single or group of occupations. Types of schools included in this specialized group may be of the following:

Vocational/technical — A school offering a wide variety of occupational programs or clusters of programs. Schools in this category may be considered multiprogram schools.

Technical institute — An institution (usually 2-year) offering instruction in one or more of the technologies at a level above the skilled trades and below the professional level.

Business/commercial school — A school offering programs in business occupations such as accounting, data processing, word processing, and secretarial. Special-purpose schools that offer the following programs are included: court reporting, finance, insurance, real estate, and sales.

Cosmetology/barber school — A school offering programs in hairstyling for men and women and in the care and beautification of hair, complexion, and hands. Schools in this category are primarily privately controlled; none of the specialized public schools reporting in 1978 were of this type.

Flight school — A school offering programs for training as aircraft mechanic, commercial pilot, or in other technical fields related to aviation. These schools are also virtually all private.

Trade school — A school offering training in one trade or craft or a single cluster of trades or crafts, such as auto mechanics, baking, bartending, carpentry, carpetlaying, commercial diving, cooking, dog grooming, drafting, fire protection, horseshoeing, locksmithing, meat processing, police training, truck driving, and welding.

Arts/design school — A school offering training in the performing arts, such as acting, dance, music, and singing; creative design, such as commercial art, fashion design, floristry, interior design, photography; and radio/television broadcasting. All of the schools in this category in 1978 were private.

Hospital school — A hospital offering programs in paraprofessional health or medical fields, such as nursing or radiologic technology.

Allied health school — A school (other than hospital school) offering programs in paraprofessional health or medical fields, such as dental assisting, medical assisting, practical nursing, and mortuary science.

Schools or institutions not classified in any of the above groups include schools of modeling, brewing, maritime occupations, and horsemanship.

Correspondence Schools — A correspondence school is a postsecondary institution which offers vocational programs exclusively through correspondence courses.

State Correctional Facilities — A State correctional facility is a State operated adult prison facility which offers vocational training to the incarcerated. Juvenile facilities and other than State operated facilities are excluded from this study.

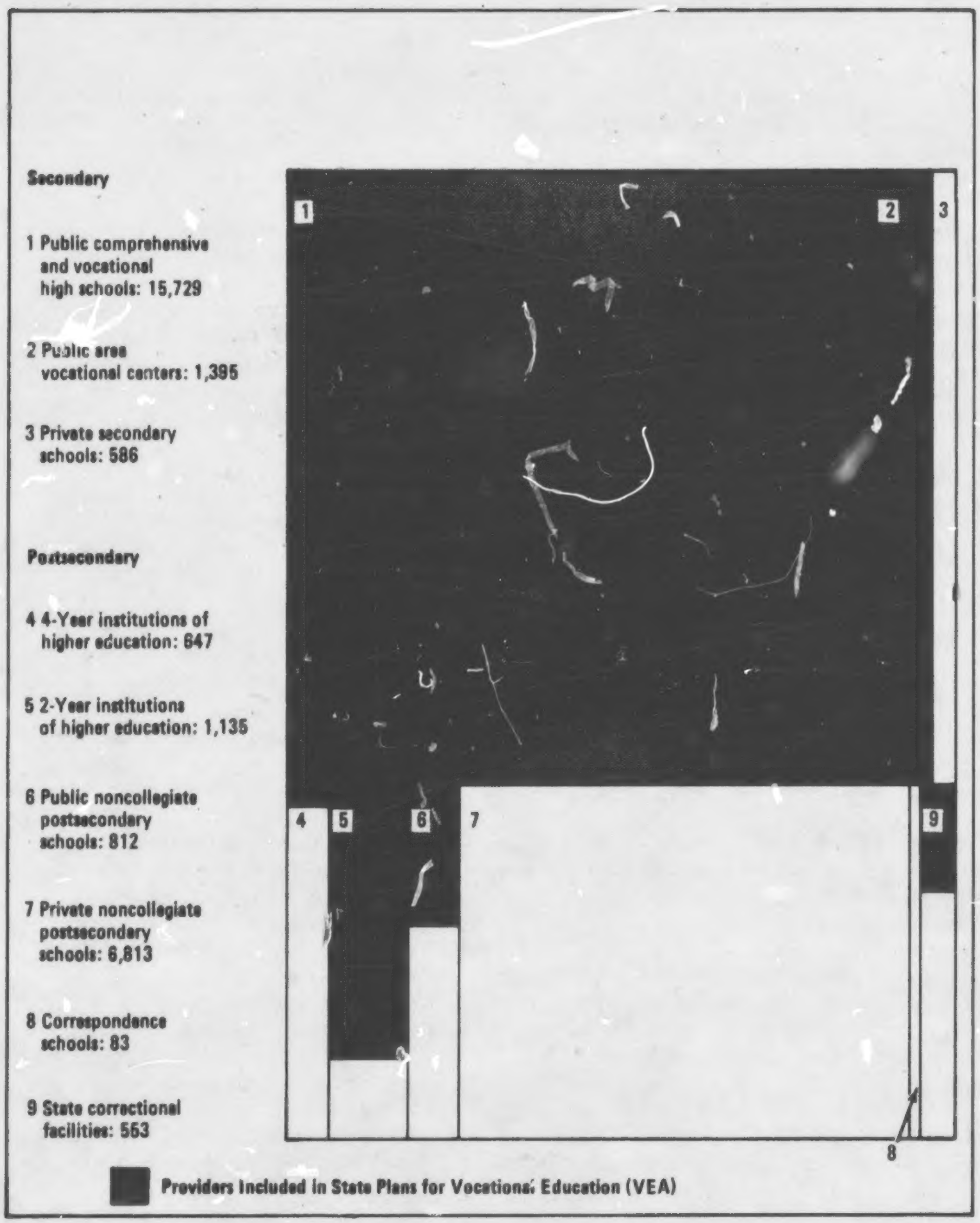
These secondary and postsecondary institutions comprise the almost 28,000 identified providers of vocational education in the United States and its outlying areas. Because the numbers of various types of institutions were compiled from several different (and not always mutually exclusive) data bases, other sources enumerating schools by type show counts that depart somewhat from the numbers presented here. These numbers do reflect a concerted attempt to both establish a nomenclature that minimizes, if not eliminates, classification problems and to reconcile data from a variety of different sources, correcting for possible multiple counting of institutions.

Of the 27,753 provider institutions offering vocational programs in 1978-79 approximately two-thirds were at the secondary level (chart 2.1). The largest single type of provider, public comprehensive and vocational high schools, makes up more than half of the total, with 15,729 schools (table 2.1). There are fewer than one-tenth as many public area vocational centers. These 1,395 institutions provide instruction in vocational education on a shared-time basis to students from throughout a school system or region, as was noted earlier. Among private secondary schools, 586 are identified as offering vocational programs.

The second largest type of provider institution is private noncollegiate postsecondary schools (often referred to as proprietary schools although many are non-profit institutions). The 6,813 schools in this category make it less than half the size of the largest group. More than 60 percent of these schools are very small, with enrollments of 100 students or less (table 2.2). The reported numbers of these private noncollegiate schools dropped by 12.9 percent between 1974 and 1978 (table 2.3). The public schools in the noncollegiate category, of which there were 812 recorded in 1978, tended to have somewhat larger enrollments. Even so, more than half, 53.0 percent, has 250 students or less in 1978. While these schools also have declined in number since 1974, the decrease has not been quite as rapid as for the private schools. There were 9.0 percent fewer public noncollegiate schools in 1978 than in 1974.

A sizeable share of the nation's colleges and universities also offer vocational training at the postsecondary level. Of the 1,211 2-year institutions, almost all (1,135) offer vocational programs. Among 4-year schools, one third, or 647, offer vocational programs. The 553 State correctional facilities also provide many types of programs.

Chart 2.1
Providers of Vocational Education



SOURCE: Table 2.1

The schools making up this universe of 27,753 vocational education providers include institutions offering programs administered under the Vocational Education Act (VEA) as well as others outside the jurisdiction and scope of the Act. All of the institutions in this universe are technically eligible to receive Federal funds. Nevertheless, State policy, institutional choice or other reasons caused approximately one institution in three to receive no financial assistance under the VEA. Thus a share, but not all, of the enrollments in these institutions are included in the State Plans for Vocational Education required by the VEA and reported as part of the Vocational Education Data System (VEDS). Coverage at the secondary level is most complete. All of the public comprehensive and vocational high schools and the public area vocational centers counted in this report are included in VEDS. (There are some comprehensive high schools which offer vocational education programs not administered under the Vocational Education Act, but data are not available on the number of such schools.) Private secondary schools are not included in VEDS.

At the postsecondary level, the receipt of Federal funds is variable depending on the type of institution in each category. It is estimated that over three-fourths of the 2-year institutions of higher education offer VEA-administered programs. Smaller shares of the public noncollegiate schools and correctional facilities have programs covered by State plans of vocational education. A very small share of the 4-year institutions of higher education are included in State plans, only about 5 percent, while virtually none of the private noncollegiate postsecondary schools or correspondence schools are included. Information regarding these schools, their offerings, enrollments and other characteristics must be obtained from sources other than VEDS.

Table 2.[illegible]
Number of secondary and postsecondary institutions offering vocational education programs, by type of institution and by State or outlying area: 1978-79

State or outlying area	Total	Public comprehensive or vocational high schools	Public area voc. centers (secondary)	Private secondary schools	Public noncollegiate postsecondary institutions	Private noncollegiate postsecondary institutions	Correspondence schools	2-Year institutions of higher education	4-Year institutions of higher education	State correctional facilities
Totals	27,753	15,729	1,[illegible]	586	812	6,813	83	1,135	647	553
Alabama	636	369	113	9	24	65	0	23	12	21
Alaska	200	150	2	2	3	22	1	10	1	9
Arizona	350	150	3	8	6	154	4	14	3	8
Arkansas	470	333	9	5	28	67	0	10	12	6
California	2,363	1,117	63	56	23	939	20	111	22	12
Colorado	422	252	17	7	9	102	4	16	11	4
Connecticut	350	167	16	6	17	109	2	18	11	4
Delaware	71	28	4	2	0	22	1	6	3	5
District of Columbia	66	16	1	4	2	27	2	0	7	7
Florida	697	316	28	18	30	231	6	30	12	26
Georgia	616	333	26	10	39	148	2	23	16	19
Hawaii	80	38	0	2	1	21	0	6	3	9
Idaho	176	124	2	0	11	30	0	3	4	2
Illinois	1,286	776	32	24	18	349	6	55	16	10
Indiana	613	358	31	19	10	144	2	17	26	6
Iowa	708	565	0	10	2	94	0	23	7	7
Kansas	391	246	14	5	14	65	0	24	15	8
Kentucky	489	252	72	9	24	96	0	10	16	10
Louisiana	620	389	18	11	36	135	0	5	17	9
Maine	158	62	22	11	7	37	0	6	10	3
Maryland	455	252	19	7	3	126	1	21	6	20
Massachusetts	552	247	22	24	30	164	3	41	13	8
Michigan	902	436	44	23	13	304	2	38	28	14
Minnesota	685	422	61	7	41	110	0	23	9	12

Table 2.1

Number of secondary and postsecondary institutions offering vocational education programs, by type of institution and State or outlying area: 1978-79 -- continued

	Total	Public comprehensive or vocational high schools	Public area voc. centers (secondary)	Private secondary schools	Public noncollegiate postsecondary institutions	Private noncollegiate postsecondary institutions	Correspondence schools	2-Year institutions of higher education	4-Year institutions of higher education	State correctional facilities
Mississippi	381	228	61	8	3	52	1	21	5	2
Missouri	697	359	55	12	36	178	1	17	30	9
Montana	174	120	0	1	5	37	0	3	4	4
Nebraska	361	255	0	12	5	61	1	10	13	4
Nevada	95	50	1	1	0	34	0	3	2	4
New Hampshire	155	80	20	3	1	27	0	10	12	2
New Jersey	630	311	35	17	22	203	1	20	14	7
New Mexico	175	95	3	3	8	46	0	7	7	6
New York	1,026	420	72	52	22	317	6	79	36	22
North Carolina	681	386	8	8	5	109	0	74	18	73
North Dakota	212	148	9	5	0	34	0	7	6	3
Ohio	1,306	735	76	19	50	336	5	46	30	9
Oklahoma	693	475	35	5	30	110	0	19	9	10
Oregon	347	199	4	3	1	117	0	13	6	4
Pennsylvania	1,277	663	67	62	35	351	3	46	41	9
Rhode Island	112	51	0	6	1	38	0	2	8	6
South Carolina	416	242	33	4	25	56	1	26	11	18
South Dakota	225	160	6	7	8	27	0	2	12	3
Tennessee	584	287	62	7	44	125	1	23	24	11
Texas	2,452	1,769	117	17	55	397	1	61	20	15
Utah	165	85	2	1	9	50	0	7	5	6
Vermont	109	49	15	9	2	16	0	3	7	8
Virginia	541	252	39	9	7	152	3	25	8	46
Washington	539	302	4	13	5	173	2	27	4	9
West Virginia	310	150	50	3	25	50	0	8	14	10
Wisconsin	544	380	0	16	15	98	1	19	7	8
Wyoming	87	57	1	4	1	11	0	7	0	6

Table 2.1
Number of secondary and postsecondary institutions offering vocational education programs, by type of institution and State or outlying area: 1978-79 -- continued

Outlying area	Total	Public comprehensive or vocational high schools	Public area voc. centers (secondary)	Private secondary schools	Public noncollegiate postsecondary institutions	Private noncollegiate postsecondary institutions	Correspondence schools	2-Year Institutions of higher education	4-Year Institutions of higher education	State correctional facilities
American Samoa	6	4	1	NA	NA	NA	NA	1	0	NA
Guam	2	1	0	NA	NA	NA	NA	0	1	NA
Puerto Rico	89	14	0	NA	1	47	0	15	12	NA
Trust Territory of the Pacific Islands	2	1	0	NA	NA	NA	NA	1	0	NA
Virgin Islands	4	3	0	NA	NA	NA	NA	0	1	NA
Commonwealth of Northern Marianas	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA Not Available.

SOURCES: United States Department of Education, National Center for Education Statistics, Directory of Postsecondary Schools with Occupational Programs, 1978, Education Directory: Colleges and Universities 1978-79; Survey of nonpublic elementary and secondary schools, 1978, and discussions with State personnel; United States Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, 1979; Carlson, Richard, National Institute of Education, Vocational Education in the Prison Setting, draft report used with permission; and Kililea Associates, Inc., Counts of Providers of Vocational Education, August 1980.

Table 2.2

Number and percent of noncollegiate postsecondary schools with occupational programs, by size: 1974, 1976, and 1978

Size of school	Total			Public			Private		
	1974	1976	1978	1974	1976	1978	1974	1976	1978
				Number of schools					
Total	8,716	8,499	7,625	892	990	812	7,824	7,509	6,813
Less than 25 students	2,223	1,895	1,601	155	173	143	2,068	1,722	1,458
25-49 students	1,804	1,878	1,342	86	158	74	1,718	1,720	1,268
50-99 students	1,612	1,589	1,464	103	63	91	1,509	1,526	1,373
100-249 students	1,621	1,853	1,708	151	196	123	1,470	1,657	1,585
250-499 students	706	739	702	144	158	120	562	581	582
500-999 students	349	365	404	136	143	126	213	222	278
1,000-2,499 students	253	136	175	115	65	97	138	71	78
2,500 students and over		44	53		34	35		10	18
Students not reported	148	0	176	2	0	3	146	0	173
				Percentage distribution					
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 25 students	25.5	22.3	21.0	17.4	17.5	17.6	26.4	22.9	21.4
25-49 students	20.7	22.1	17.6	9.6	16.0	9.1	22.0	22.9	18.6
50-99 students	18.5	18.7	19.3	11.6	6.4	11.2	19.3	20.3	20.2
100-249 students	18.6	21.8	22.4	16.9	19.8	15.1	18.8	22.1	23.3
250-499 students	8.1	8.7	9.2	16.1	16.0	14.8	7.2	7.7	8.5
500-999 students	4.0	4.3	5.3	15.2	14.4	15.5	2.7	3.0	4.1
1,000-2,499 students	2.9	1.6	2.3	12.9	6.6	11.9	1.8	.9	1.1
2,500 students and over		.5	.7		3.4	4.3		.1	.3
Students not reported	1.7	0	2.3	.2	0	.4	1.9	0	2.5

SOURCE: United States Department of Education, National Center for Education Statistics, Enrollments and Programs in Noncollegiate Postsecondary Schools, 1978, 1979.

Table 2.3

Number and percent of noncollegiate postsecondary schools, by control and type: 1974, 1976, and 1978

Control and type of school	Number of schools 1974	Number of schools 1976	Number of schools 1978	Percentage distribution 1974	Percentage distribution 1976	Percentage distribution 1978
ALL SCHOOLS						
Total	8,716	8,499	7,625	100.0	100.0	100.0
Vocational/technical 1/	1,167	592	606	13.4	7.0	7.9
Technical institute 1/	215	211	99	2.5	2.5	1.3
Business/office	1,242	1,221	1,249	14.2	14.4	16.4
Cosmetology/barber	2,405	2,347	2,163	27.6	27.6	28.4
Flight	1,483	1,406	1,064	17.0	16.5	14.0
Trade	708	762	716	8.1	9.0	9.4
Arts/design 1/	0	256	246	0	3.0	3.2
Hospital	1,247	1,112	917	14.3	13.1	12.0
Allied health 1/	0	341	356	0	4.0	4.7
Other	249	251	210	2.9	2.9	2.7
PUBLIC						
Total	892	990	812	100.0	100.0	100.0
Vocational/technical 1/	579	453	504	64.9	45.8	62.1
Technical institute 1/	52	39	7	5.8	3.9	.9
Business office	1	1	4	.1	.1	.5
Cosmetology/barber	4	22	0	.4	2.2	0
Flight	6	45	5	.[illegible]	4.5	.6
Trade	30	17	14	3.4	1.7	1.7
Arts/design 1/	0	1	0	0	.1	0
Hospital	170	215	147	19.1	21.7	18.1
Allied health 1/	0	127	114	0	12.8	14.0
Other	50	70	17	6.2	7.2	2.1
PRIVATE						
Total	7,824	7,509	6,813	100.0	100.0	100.0
Proprietary	6,512	6,435	5,814	100.0	100.0	100.0
Vocational/technical 1/	515	562	76	7.9	8.7	1.3
Technical institute 1/	150	166	83	2.3	2.6	1.4
Business/office	1,208	1,203	1,201	18.5	18.7	20.7
Cosmetology/barber	2,397	2,307	2,162	36.8	35.9	37.2
Flight	1,472	1,261	1,055	22.6	21.1	18.1
Trade	571	599	616	8.8	9.3	10.6
Arts/design 1/	0	0	220	0	0	3.9
Hospital	24	14	18	.4	.1	.3
Allied health 1/	0	0	195	0	0	3.4
Other	175	223	188	2.7	3.5	3.2
Nonprofit	1,312	1,074	999	100.0	100.0	100.0
Vocational/technical 1/	73	41	26	5.6	3.8	2.6
Technical/institutel 1/	13	5	9	1.0	.5	1.0
Business/office	33	17	44	2.5	1.6	4.4
Cosmetology/barber	4	19	1	.3	1.8	.1
Flight	5	0	4	.4	0	.4
Trade	107	102	86	8.2	9.5	8.6
Arts/design 1/	0	0	26	0	0	2.6
Hospital	1,053	883	752	80.2	82.2	75.3
Allied health 1/	0	0	46	0	0	4.6
Other	24	7	5	1.8	.7	.5

1/ Change in definition of type of school.

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Enrollments and Program in Noncollegiate Postsecondary Schools, 1978, 1979.

Chapter 3

Enrollment in Vocational Education

Institutions offering vocational programs enrolled close to 20 million vocational students in 1978. The diversity of programs and the students they serve complements the variety of institutions examined earlier. Both the level of the institutional program and the intent of the students vary, in addition to the more obvious range of program choices. The 19,563,175 vocational enrollments reported by secondary and postsecondary schools (table 3.1) are divided between the two levels in shares of approximately two-thirds secondary and one-third postsecondary (65.1 percent and 34.9 percent, respectively)[1]. The division of enrollment by level is close to the division of institutions examined earlier, which was 63.9 percent secondary and 36.2 percent postsecondary.

The distribution of enrollments among the provider institutions differs from the distribution of numbers of institutions. Size differences among the types of institutions are responsible for these variations. At the secondary level, the public secondary schools, area centers, and secondary level adult programs account for virtually all secondary vocational enrollments; less than a single percentage point of these enrollments are in private schools (chart 3.1). Distribution of enrollments at the postsecondary level departs markedly from the distribution of institutions. The 2-year institutions of higher education account for by far the largest single portion of the postsecondary enrollments, enrolling 64.9 percent of all postsecondary students while constituting only 11.3 percent of all postsecondary institutions. The remaining 35.1 percent of postsecondary enrollments are located in the remaining five categories of institutions, with private noncollegiate schools enrolling the second largest share, 15.6 percent of postsecondary students, or 997,196.

Not all of the enrollments are in programs which are administered under the Vocational Education Act (VEA), as amended. Vocational programs in most privately controlled institutions are excluded from coverage in the State Plans for Vocational Education, as are many other programs for reasons ranging from lack of State approval to State policy or jurisdictional anomalies. Approximately 88.3 percent of the almost 19.6 million vocational students were enrolled in programs administered under the VEA in 1978-79. (It should be noted, however, that information was not available on secondary enrollments excluded from State Plan coverage.)

Enrollments in VEA programs are reported by program level (e.g., postsecondary) rather than by type of institution. Therefore, it is not possible to determine the precise proportion of the enrollments from each type of provider which are included in State Plans for Vocational Education administered under the VEA. It appears, however, that virtually all public secondary programs are included in State Plans, while almost all private programs at the secondary level are excluded. At the postsecondary level, it is estimated that almost 80 percent of the vocational students in public noncollegiate postsecondary schools and almost 90 percent of similar students at 2-year institutions of high education are enrolled in programs administered under the VEA. An estimated 30 percent of the vocational enrollments in State correctional facilities and 5 percent of the enrollments in 2-year vocational programs at 4-year institutions of higher education are included in State Plans. Virtually all private noncollegiate and correspondence school enrollments are excluded.

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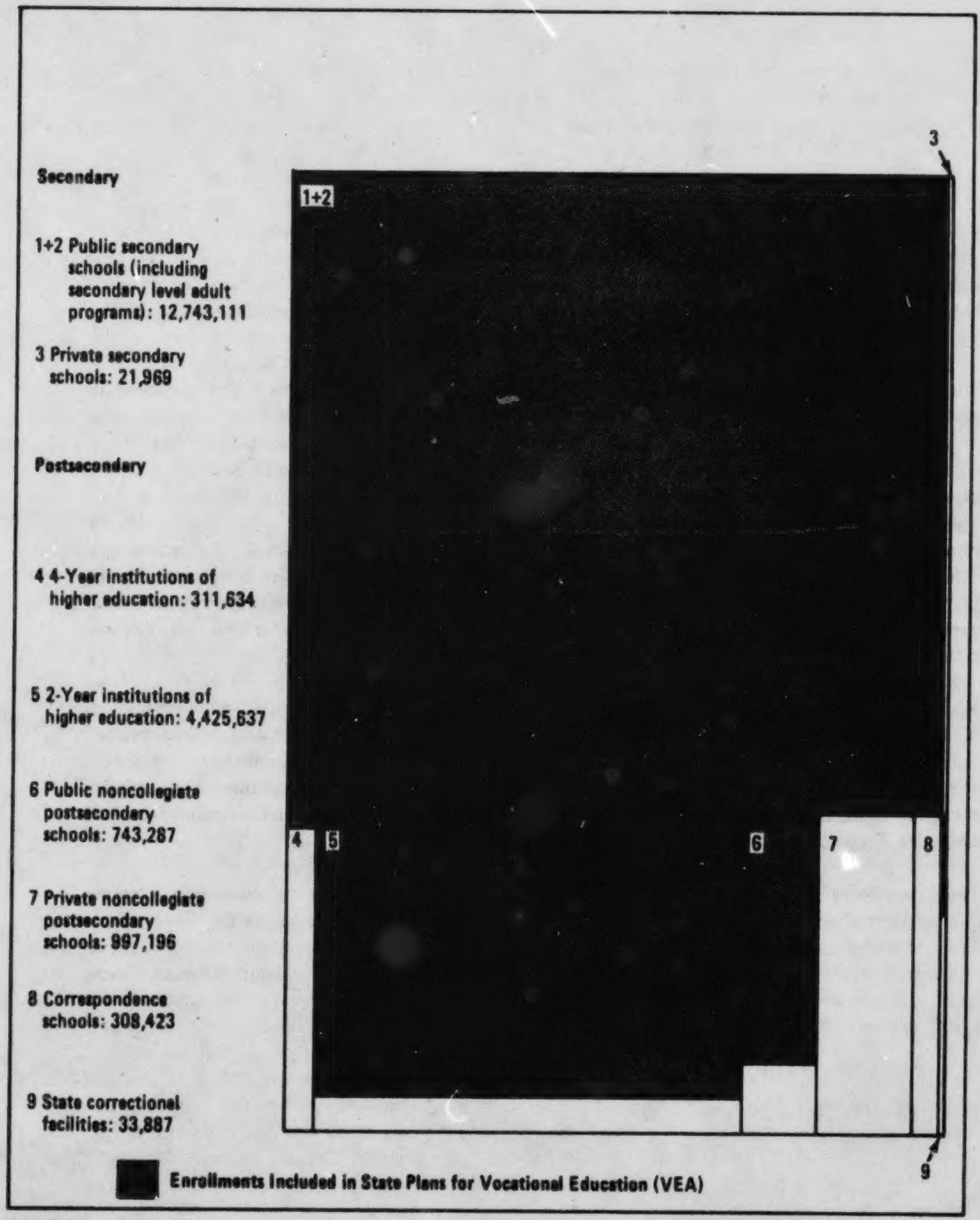
[1] The enrollment numbers were derived from multiple sources, and, in some cases, complex estimation procedures were required to adjust for basic incompatibilities among the various data bases. The individual numbers are, therefore, subject to varying degrees of error.

Chart 3.1
Enrollments in Vocational Education



SOURCE: Table 3.1

Vocational education programs are traditionally grouped into nine program areas. The areas used to categorize vocational program offerings are:

Agriculture,
Distribution,
Health,
Consumer and Homemaking,
Occupational Home Economics,
Industrial Arts,
Office Occupations,
Technical, and
Trade and Industrial

These program areas provide a particularly useful basis for reviewing characteristics of students, since they permit examination of policy issues related to educational access and labor market distribution. Because of the intentionally close relationship between enrollments and job entry in these fields, vocational education is a focal point for facilitating entry of minorities and females into the labor market, particularly into those areas where their participation has historically been limited.

The nine program areas differ greatly in size. The largest in terms of enrollment is Office Occupations, with about one of every five vocational enrollments. The Trade and Industrial area comprises an almost identical share of the total, with Consumer and Homemaking enrollments only somewhat smaller than either of these two areas. The remaining areas each enroll fewer than half as many as the largest area. The smallest area, Occupational Home Economics, is only about one-sixth the size of the largest area.

Enrollment counts in each of the various program areas may be examined for each level of instruction. Rather than presenting enrollments by type of provider institution, VEDS categorizes enrollments by the following instructional levels: Below grade 11, grades 11-12, postsecondary, adult (long-term) and adult (short-term). The designations are intended to differentiate among both the level and the nature of instructional opportunities.

Vocational enrollments reported to VEDS for 1978-79 show 17,033,620 students enrolled at all levels (table 3.2). It was noted earlier that approximately 88 percent of the estimated total of vocational education enrollments are counted by VEDS. While the order of program areas by size varies in some cases between the universe picture and VEDS, the three program areas with the largest total enrollment, all close in size, remain Consumer and Homemaking, Office Occupations, and Trade and Industrial. The two smallest areas of reported enrollments are Technical and Occupational Home Economics.

The order of program areas by enrollment size is markedly different at each level of instruction. Thus the enrollment picture should be reviewed at each level to describe adequately the character of vocational education. At grades 11 and 12, Consumer and Homemaking and Office Occupations are the largest areas, accounting for 50 percent of the total enrollments. Trade and Industrial is the third largest program area at these grade levels, with 18 percent of the enrollments. The fewest enrollments are in Technical programs, which account for less than one percent of the total.

At the postsecondary level the comparative enrollment patterns are totally different. Office Occupations remains the largest area by a substantial margin, but Consumer and Homemaking is now one of the smallest. The Trade and Industrial program area continues to account for a large share of the enrollments with slightly less than 20 percent of the total. Substantial increases in percentage of enrollments are seen in Distribution, Health, Office Occupations, and Technical program areas. Decreases in percentage of enrollments are evident in Agriculture, Consumer and Homemaking, and Industrial Arts programs.

Adult enrollments are reported using two categories: short-term adults— adults enrolled in programs of under 500 contract hours duration — and long-term adults. Comparisons of enrollment profiles by program area underscore fundamental differences in these two enrollment categories. Trade and Industrial has the largest enrollment for both categories. But it makes up only 30 percent of short-term adult enrollments, whereas it represents 44.3 percent of long-term adult enrollments. Consumer and Homemaking reemerges as a substantial area for short-term adult instruction, with 21.5 percent of total short-term enrollments.

The great differences in the total size of the nine program areas conceal important differences in the distribution of these areas among the various levels of instruction. For example, Office Occupations is such a large area that it comprises a substantial share of the vocational instruction at each level. Yet enrollments for many program areas are concentrated at a particular level. Thus it is useful to look at each program area and its enrollment distribution across levels in addition to the earlier examination of distributions by level. Three program areas emerge as being predominantly secondary (i.e., grade 12 or below): Agriculture, Consumer and Homemaking, and Industrial Arts. For each of these areas, more than 70 percent of all enrollments are at the secondary level. The secondary shares for the three are 71.7, 75.8 and 98.9 percent, respectively. Two other areas have majorities at the secondary level, though they are not as overwhelmingly secondary: Occupational Home Economics, with 61.8 percent of enrollments and Office Occupations, with 59.3 percent of enrollments.

In contrast, instruction in some areas is usually offered after secondary school. Over 94 percent of Technical enrollments are at these levels. Nearly 85 percent of Health enrollments are found in the combined three post-high-school categories — postsecondary, short-term a[illegible], and long-term adult. A majority of Trade and Industrial enrollments also occur in this group of levels.

These enrollment profiles demonstrate that vocational education is heterogeneous across levels, as it was seen earlier to be heterogeneous across providers. The enrollment figures provide distinctive patterns of vocational students at each level. In addition, most program areas are characterized by enrollments concentrated at either the secondary or postsecondary levels. In few cases does a program area consititute a sizeable share of enrollments at all levels.

The previous observations made concerning enrollment distributions across areas and across levels referred to enrollments in VEA administered programs. The generalizations also applied to all vocational enrollments, including those in programs not administered under the VEA. Because more detailed information is available concerning VEA programs, however, the remainder of this chapter will examine only enrollments in those programs.

The program area differences noted earlier may reflect differences in prerequisite requirements as well as in student intent in choosing vocational education instruction. The concept of occupationally specific enrollments permits these differenes to be quantified. Occupationally specific programs are those programs offered at or above grade 11 which purport to impart entry level job skills for a specific gainful occupation. Excluded are all programs in Industrial Arts and Consumer and Homemaking areas, as well as prevocational, counseling and guidance, and cluster programs. By limiting consideration to occupationally specific enrollments, one can focus on those vocational students who would be expected to have the most immediate and planned impact on the gainful labor market.

Occupationally specific enrollments, which at all levels totaled 7,625,937 in 1978, accounted for 44.7 percent of all VEA enrollments (table 3.3). As might be expected given the profiles of enrollments across program areas at different levels, the shares of enrollments at each level that are occupationally specific also vary. Those differences are a consequence of the specificity or generality of an area, the range of the offerings that constitute the area, and its prerequisite requirements. Smaller proportions of secondary enrollments meet the conditions of being in occupationally specific programs than do postsecondary enrollments. None of the instruction below grade 11 is included, and somewhat more than half, 56.4 percent, of the enrollment in grades 11 and 12 is identified as occupationally specific. In sharp contrast, 92.0 percent of postsecondary enrollments are in occupationally specific programs. The difference between long-term and short-term adult enrollment classifications is again notable, as a substantial majority (87.5 percent) of long-term adult enrollments are occupationally specific compared with the slightly more than half (51.1 percent) of short-term adults which are so classified.

The occupationally specific enrollments are also found in varying proportions by program areas (chart 3.2). Enrollments in Consumer and Homemaking and Industrial Arts areas are excluded by definition. In the remaining areas, occupationally specific enrollments account for a range of enrollments, from a low of 51.2 percent for Agriculture to a high of 88.7 percent for Technical. Occupational Home Economics also has a low share of occupationally specific enrollments, only 56.9 percent of program area enrollments.

Higher proportions of occupationally specific enrollments are found in the areas of Technical, Distribution, Trade and Industrial, and Health. The detailed listing of enrollments by level for occupationally specific programs (table 3.4) both underscores the earlier discussion of concentration of program areas at a particular level and also provides an improved intuitive basis for examining the specific occupations being stressed in vocational education at the end of the 1970's. The three largest specific programs, with a combined enrollment of 1.25 million students, are Stenographic, Secretarial, and related; Filing, Office Machines and General Office; and Accounting and Computer Occupations. The next three largest programs, which are considerably smaller, are Typing and Related Occupations, Auto Mechanics, and Agricultural Production, with enrollments totaling 824,000. Enrollments in these programs which occur in cooperative education programs, involving training and work experience for pay, are identified in table 3.5. Cooperative education enrollments by State are listed in table 3.6.

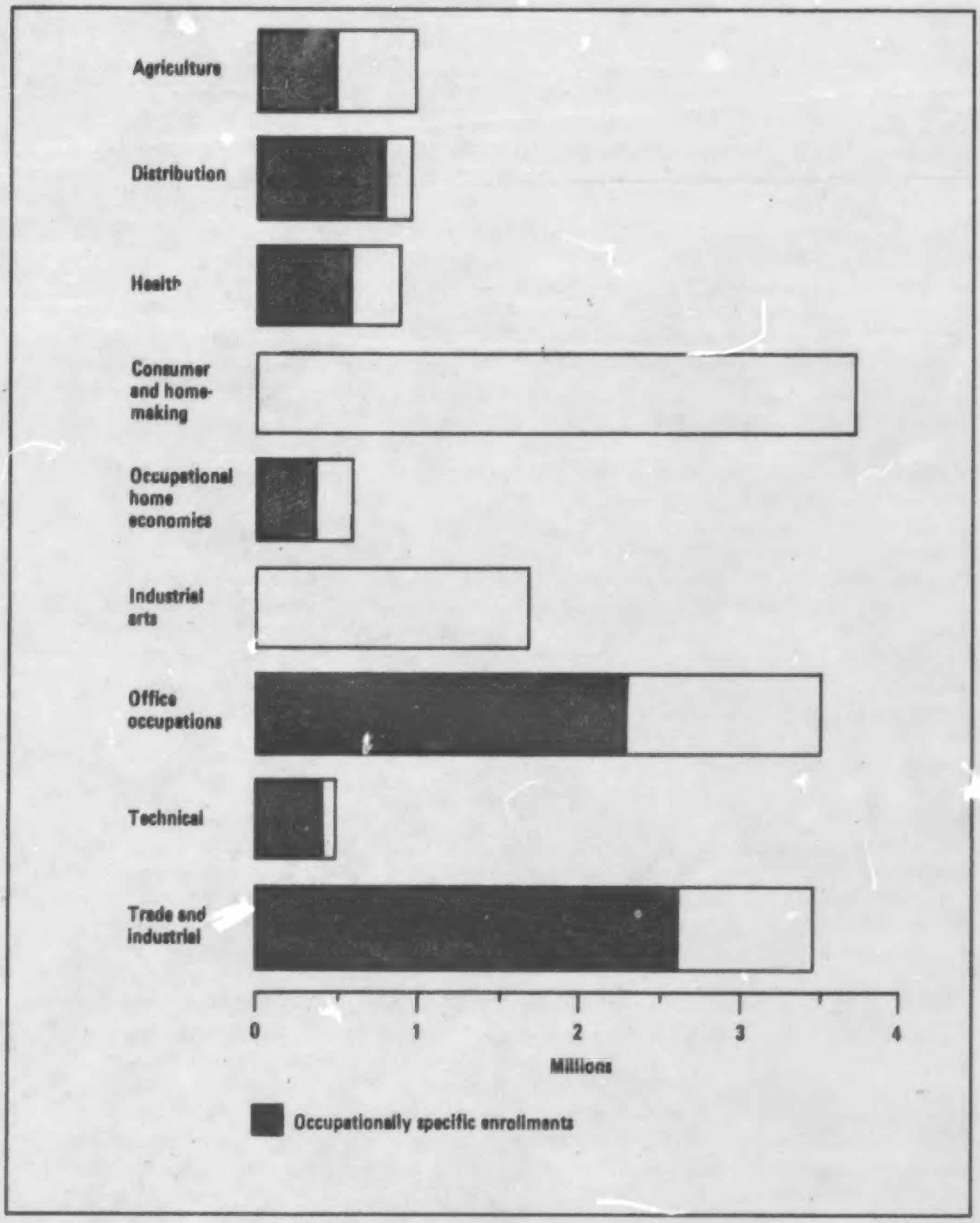
Enrollments in some specific programs in the Consumer and Homemaking area, an entire program area not included in the occupationally specific category, in several instances exceed those of even the largest occupationally specific programs. Comprehensive Homemaking enrolled 1,424,290, almost as many as the sum of the largest three programs mentioned earlier (table 3.7). Another sizeable program in the area is Foods and Nutrition (505,783).

If profiles of all enrollments and occupationally specific enrollments are compared, the greater contribution of postsecondary and long-term adult levels to occupationally specific enrollments becomes apparent (chart 3.3). The more than one-quarter of all enrollments that are below 11th grade are eliminated, of course. As a result, while more than half of total enrollments are at the secondary level, more than half of all occupationally specific enrollments are at the postsecondary level.

The distribution of vocational enrollments among the occupationally related program areas (i.e., the nine program areas described earlier minus Consumer and Homemaking and Industrial Arts) has changed somewhat over time. While the large areas of Office Occupations and Trade and Industrial each continue to account for almost one-third of all enrollments in this group, the sizes of the other program areas are displaying change (table 3.8). Agriculture has decreased by more than two percentage points since 1973; Health has shown a similar increase. Occupational Home Economics has increased slightly, with Distribution showing a small decrease.

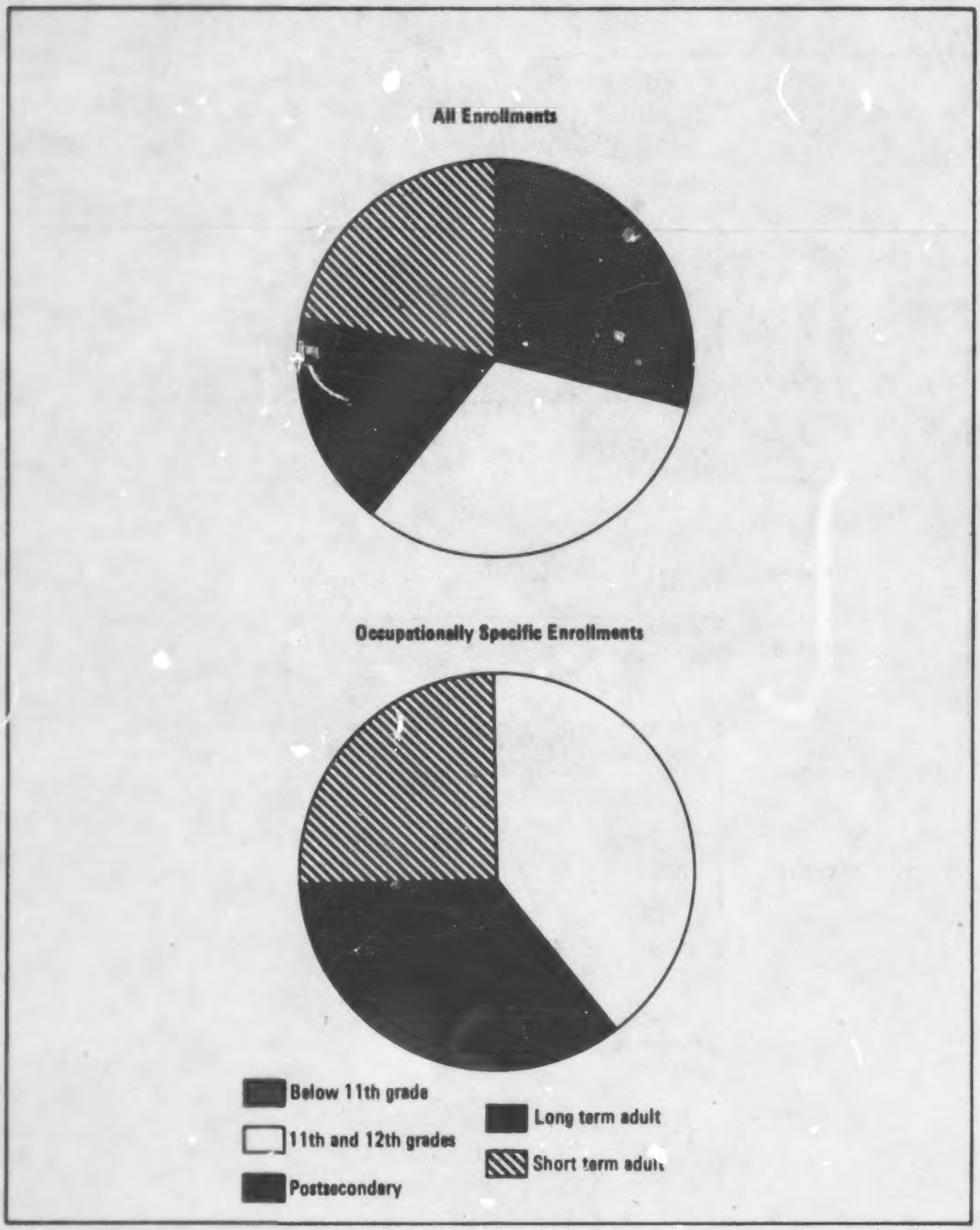
In comparing reported total enrollment numbers for 1977-78 to those for 1978-79, both real change and changes resulting from reporting differences are combined (chart 3.4 and table 3.9). Major increases occurred in Occupational Home Economics (25.7 percent) and Industrial Arts (12.7 percent). The large growth in Occupational Home Economics is attributable to increases in enrollments in programs on Child Development and Guidance and to increased enrollments below grade 11. The increase in Industrial Arts, however, is due in large part to a reporting change; several States appear to be including Industrial Arts enrollments where they had previously been unreported.

Chart 3.2
Vocational Education Enrollments (VEA), by Program Area



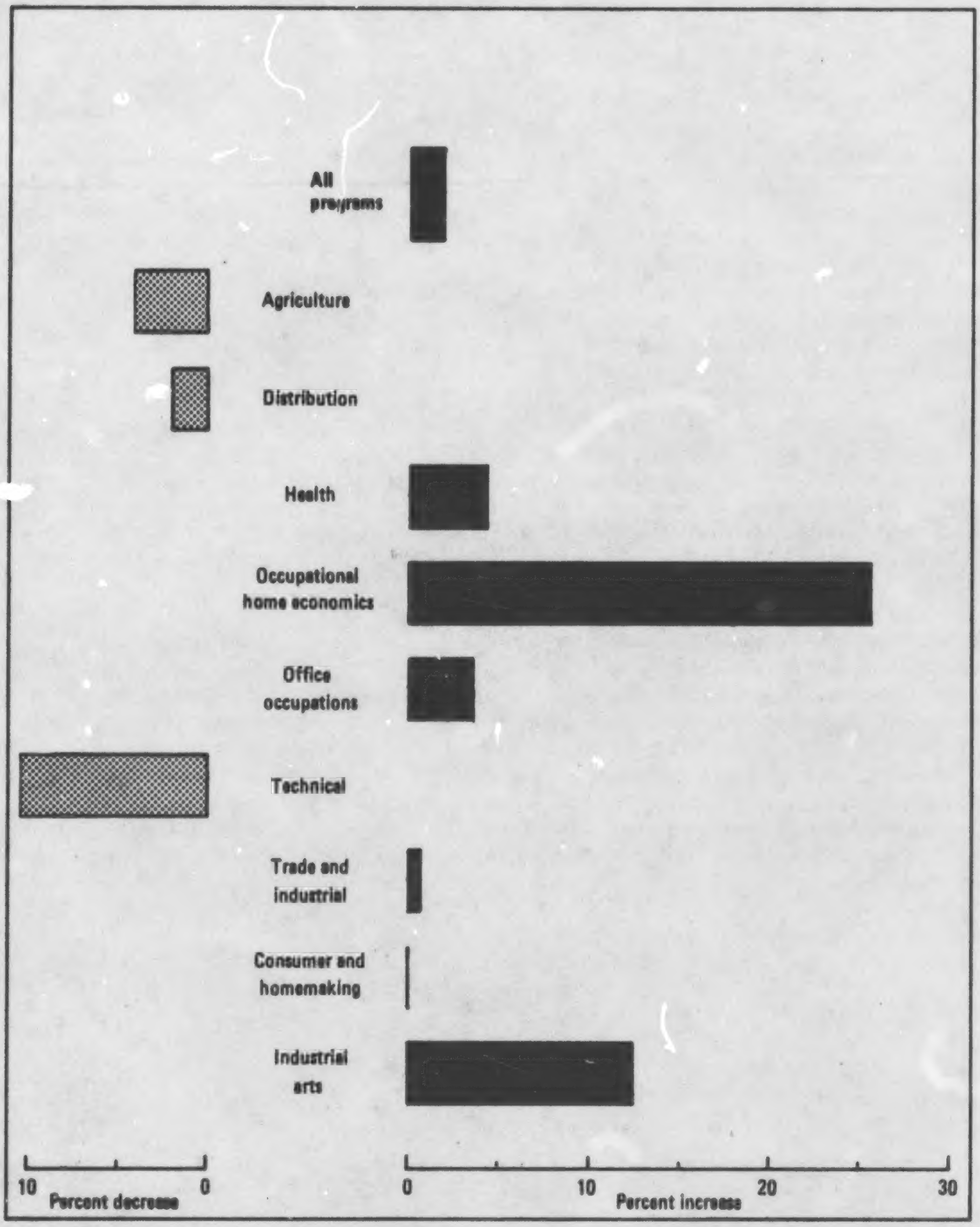
SOURCE: Tables 3.2 and 3.3

Chart 3.3
Vocational Education Enrollments (VEA) by Level



SOURCE: Tables 3.2 and 3.3

Chart 3.4
Percent change in Reported Enrollments (VEA), by Program Area: 1977-78 to 1978-79



SOURCE: Table 3.9

In several instances, emphases on particular programs within the various program areas also have shifted over time. In the Consumer and Homemaking area, enrollment changes reflect the impact of general social trends observable in other contexts. Enrollments in the Child Development and Guidance program rose 47.8 percent between fiscal years 1976 and 1979 from the 1976 figure of 193,000 (chart 3.5 and table 3.10). Other large increases occurred in programs emphasized by P.L. 94-482, which devoted a separate section of the law to the Consumer and Homemaking program area. Increases were reported in Foods and Nutrition program enrollments (49.5 percent); Family Relations (50.3 percent); and Consumer Education (25.1 percent). Of the areas highlighted by the legislation, only Home Management exhibited a token increase (6.8 percent). The more general programs of Comprehensive Homemaking and Other Homemaking recorded decreases for the same period.

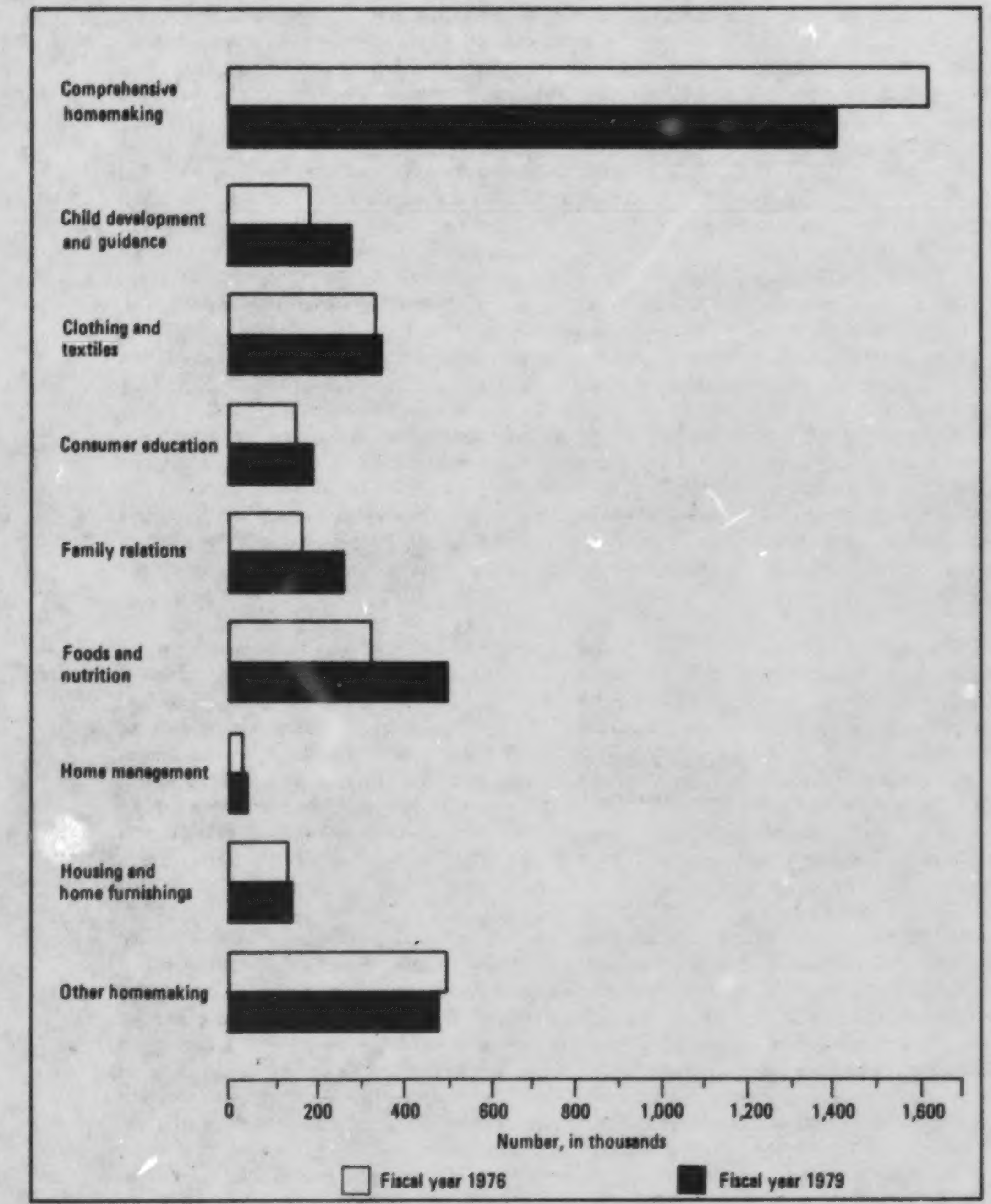
Enrollment distributions within each program area reflect the changing labor market and technological advances (tables 3.10 through 3.15). In Occupational Home Economics, the Care and Guidance of Children program also showed a substantial increase, from 27.6 percent of all enrollments in the program area for 1972 to 41.6 percent of enrollments in the area in 1979 (table 3.14). Programs in Emergency Medical Technology, not even counted until 1975, constituted 12.7 percent of enrollments in the Health area in 1979 (table 3.13). In the Office Occupations area, programs in typing and related skills have declined as a share of all enrollments, giving way to increases in Accounting and Computing, and Filing and Office Machine enrollments (table 3.15). However, in the Technical and Trade and Industrial areas, relatively little shifting of program shares has occurred among the ten largest programs in each program area (tables 3.16 and 3.17).

Enrollments in vocational education by State permit more detailed reviews of program distribution, enrollment concentrations by level and field, and patterns of reported change. Statistics presented here document estimated total enrollments for the universe of vocational education by type of provider (table 3.18). These numbers, compiled from many sources, may be compared with those showing total enrollments by State under the Vocational Education Act (VEA) by level (table 3.19); occupationally specific enrollments by State under the VEA by level (table 3.20); and those showing total VEA enrollments by instructional program areas (table 3.21).

The impact of the new Vocational Education Data System can be inferred from an examination of the reported enrollment changes in VEA administered programs on a State-by-State basis. An examination of 1978-79 enrollment reported through VEDS compared to enrollment submitted in 1977-78 through the earlier Office of Education collection system reveals that the States and outlying areas are split between those showing declines (26) and those showing increases (28) (charts 3.6 and 3.7 and table 3.22). While actual enrollment increases or decreases are also reflected in these numbers, the staggered pattern of gains and losses implies that the new reporting system has, indeed, had some impact in its first year of operation. However, since only 15 States or outlying areas showed increases or decreases of more than 15 percent, it is doubtful that the full impact of the new definitions, removal of duplication in enrollment counts, and elimination of undercoverage has been realized yet in most of the States.

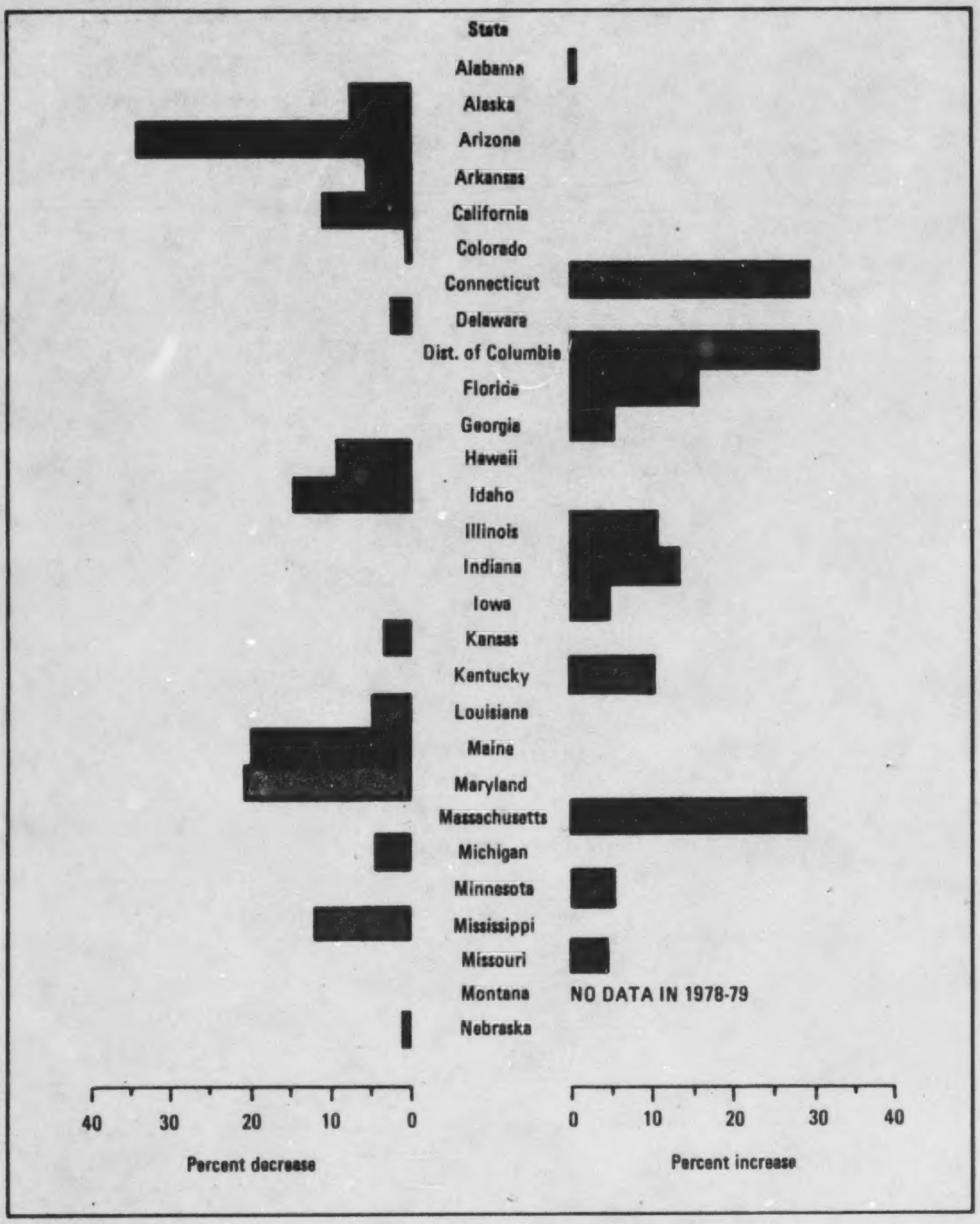
One check on the quality of those data may be made by comparing occupationally specific vocational education enrollments in grades 11-12 to total educational enrollments (nonvocational as well as vocational) in grades 11-12 (table 3.23). An analysis of the results indicates that eleven States showed occupationally specific enrollments equal to between 60 and 70 percent of total enrollments. Another three States showed occupationally specific vocational enrollments of over 70 percent of the total. These high percentages suggest that duplication is occurring in some instances, even among occupationally specific enrollments, but suggest even more that some States may still be counting course (as opposed to program) enrollments as vocational program enrollees. It is anticipated that as more and more States convert to the use of student-unit based record-keeping systems, to comply with the uniform definitions and procedures required by VEDS, a great deal of the variability revealed in these numbers will disappear. State totals should then stabilize with few, if any, major year-to-year shifts. This is likely to be especially true of occupationally specific program enrollments.

Chart 3.5
Enrollments in the Consumer and Homemaking Program Area



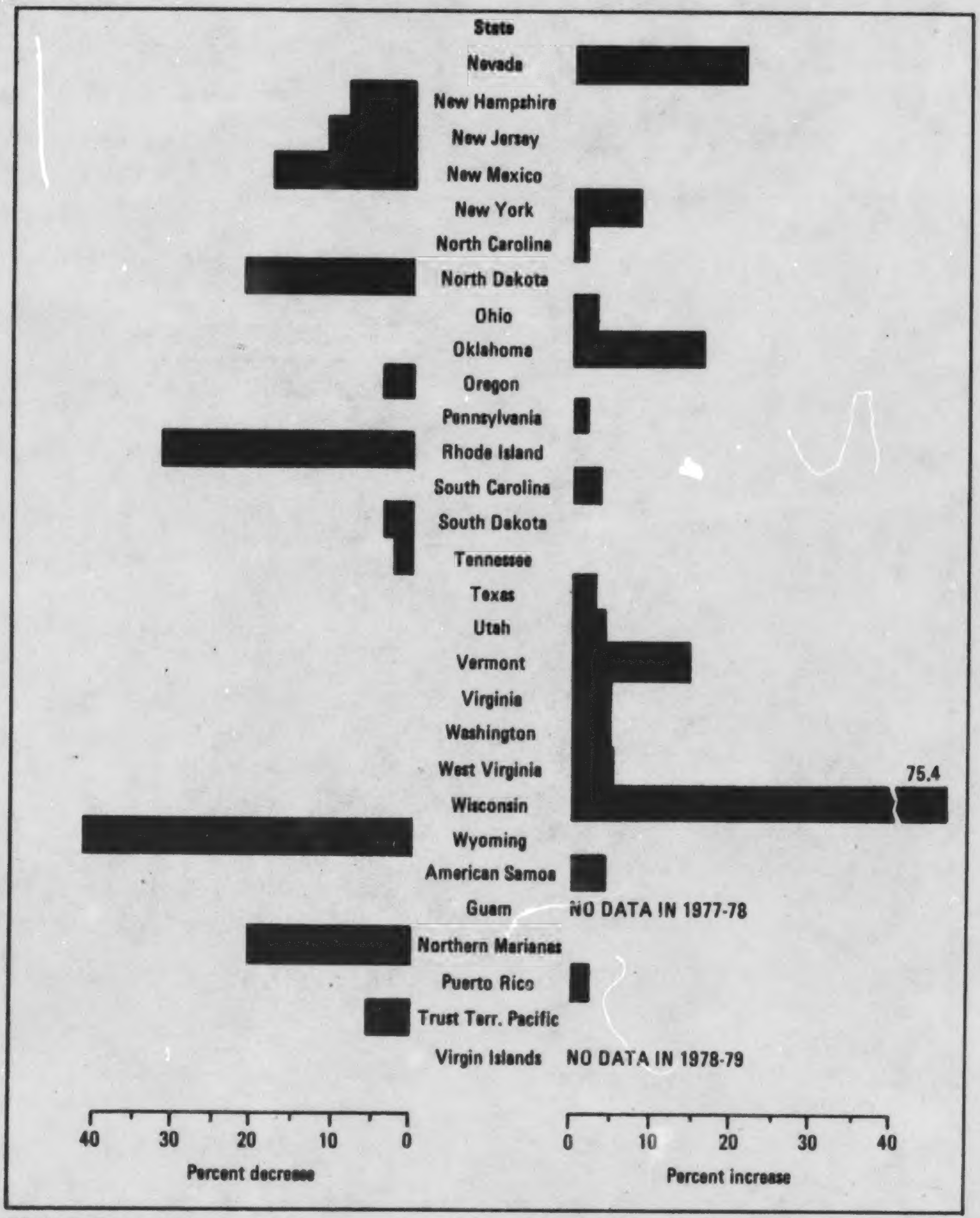
SOURCE: Table 3.10

Chart 3.6
Percent Change in Reported Enrollments (VEA), by State: 1977-78 to 1978-79



SOURCE: Table 3.22

Chart 3.7
Percent Change in Reported Enrollments (VEA) by State: 1977-78 to 1978-79



SOURCE Table 3.22

Table 3.1
Enrollment in vocational education, by program area and provider: 1978

Type of provider	Total	Agriculture	Distribution	Health	Occ. home economics	Office occupations	Technical	Trade and industrial	Consumer and homemaking	Industrial arts	Other
Total	19,563,175[2]	988,773	1,382,044	1,048,285	627,627	4,013,436	737,360	3,956,547	3,758,020	1,684,746	1,018,430
Total secondary	12,743,111[2]	845,754	503,384	214,652	418,043	2,367,187	41,767	2,093,432	3,539,621	1,678,872	1,018,430
Public secondary schools[1]	12,721,142	845,754	503,384	214,652	418,043	2,367,187	41,767	2,093,432	3,539,621	1,678,872	1,018,430
Private secondary schools	21,969	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total postsecondary	6,820,064[2]	143,019	878,660	833,633	209,584	1,646,249	695,593	1,863,115	218,399	5,874	3/
4-Year institutions of higher education	311,634	11,577	28,925	59,986	20,108	78,306	48,779	63,953	0	0	0
2-Year institutions of higher education	4,425,637	118,259	468,810	604,412	177,750	1,229,243	478,848	1,124,042	218,399	5,874	3/
Public noncollegiate postsecondary schools	743,287[2]	6,576	18,089	67,651	8,070	102,081	27,473	221,296	0	0	0
Private noncollegiate postsecondary schools	997,196	2,173	261,868	93,900	969	215,959	105,265	317,062	0	0	0
Correspondence schools	308,423	4,434	100,968	7,684	2,687	20,660	35,228	136,762	0	0	0
State correctional facilities	33,887	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA Not available.

[1] Includes individuals enrolled in secondary level programs at adult facilities. Numbers represent enrollments covered by the Vocational Education Act only.

[2] Details do not add to total because total includes enrollments for which program area counts are not available.

[3] Enrollment in the "other" category at the postsecondary level have been prorated to the other program areas.

SOURCES: (1) United States Department of Education, National Center for Education Statistics, Vocational Education Data System, preliminary data; Survey of Noncollegiate Postsecondary Schools; Survey of Nonpublic Elementary and Secondary Schools; Higher Education General Information Survey, Earned Degrees and Other Formal Awards Conferred; (2) Carlson, Richard, National Institute of Education, Vocational Education in the Prison Setting, draft report used by permission; (3) United States Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data; and (4) estimates by the National Center for Education Statistics derived from the above sources.

Table 3.2
Enrollment in vocational education programs (VEA), by program area and level: 1978-79

Program area	Total	Below grade 11	Grades 11-12	Postsecondary	Adult (Long-term)	Adult (short-term)
Total	17,033,620	4,933,537	5,375,894	1,949,558	969,560	3,805,071
Agriculture	964,452	354,644	337,954	49,038	22,061	200,755
Distribution	927,929	68,706	300,086	218,365	57,020	283,752
Health	791,155	30,201	90,799	216,722	98,527	354,906
Consumer and homemaking	3,658,475	1,363,882	1,396,653	30,095	47,790	820,055
Occupational home economics	577,818	175,547	182,099	61,177	27,156	131,839
Industrial arts	1,681,927	1,113,446	550,531	1,309	25	16,616
Office occupations	3,439,623	728,353	1,315,080	640,692	203,856	551,642
Technical	472,200	8,874	18,746	306,126	40,680	97,774
Trade and industrial	3,411,796	455,385	990,289	378,451	429,590	1,158,081
Other	1,108,245	634,499	193,657	47,583	42,855	189,651

SOURCE: United States Department of Education, National Center for Education Statistics, Vocational Education Data System.

Table 3.3
Enrollment in occupationally specific vocational education programs (VEA), by program area and level: 1978-79

Program area	Total	Grades 11-12	Postsecondary	Adult (long-term)	Adult (short-term)
Total	7,625,937	3,039,407	1,794,179	848,711	1,943,640
Agriculture	493,676	320,589	47,434	21,416	104,237
Distribution	762,090	289,167	208,595	56,145	208,183
Health	593,280	85,999	205,679	95,597	206,005
Occupational home economics	328,678	162,110	57,977	24,669	83,622
Office occupations	2,246,699	1,086,465	597,149	183,471	379,614
Technical	418,647	18,331	286,485	38,787	75,044
Trade and industrial	2,576,286	952,105	366,580	417,604	839,997
Other	206,881	124,641	24,280	11,022	46,938

NOTE: Occupationally specific enrollments include students above grade 10 enrolled in programs (except consumer and homemaking and industrial arts) which are designed to train individuals for specific occupations.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Vocational Education Data System.

TABLE 3.4 -- ENROLLMENT IN OCCUPATIONALLY SPECIFIC PROGRAMS (VEA), BY LEVEL AND BY INSTRUCTIONAL PROGRAM: 1978-79

PROGRAM	TOTAL	PROGRAM LEVEL			
		GRADES 11 & 12	POST-SECONDARY	ADULT (LONG-TERM)	ADULT (SHORT-TERM)
AGRICULTURAL PRODUCTION	170,687	146,045	14,408	10,234	69,878
AGRICULTURAL SUPPLIES/SERVICES	19,604	14,016	4,342	1,246	3,264
AGRICULTURAL MECHANICS	70,671	65,975	3,061	1,635	11,117
AGRICULTURAL PRODUCTS	5,317	3,913	1,282	122	3,381
HORTICULTURE	74,438	52,778	14,902	6,758	12,611
RENEWABLE NATURAL RESOURCES	15,997	11,397	4,088	512	1,336
FORESTRY	12,501	9,220	2,933	348	620
OTHER AGRICULTURE	20,224	17,245	2,418	561	2,030
ADVERTISING SERVICES	9,344	4,511	4,410	423	4,691
APPAREL & ACCESSORIES	25,604	16,372	8,437	795	2,671
AUTOMOTIVE	6,591	5,568	526	497	567
FINANCE & CREDIT	25,398	3,048	20,386	1,964	15,895
FLORISTRY	2,895	1,571	616	708	3,873
FOOD DISTRIBUTION	25,322	20,574	2,119	2,629	4,363
FOOD SERVICES	29,257	25,169	2,862	1,226	16,554
GENERAL MERCHANDISE	195,507	153,460	33,848	8,199	37,533
HARDWARE, BUILDING MATERIALS, ETC.	3,434	3,286	83	65	1,470
HOME FURNISHINGS	2,304	1,387	790	127	586
HOTEL & LODGING	11,752	1,985	8,922	845	6,199
INDUSTRIAL MARKETING	17,602	1,909	14,600	1,093	6,654
INSURANCE	6,472	886	3,031	2,555	10,838
PERSONAL SERVICES	5,435	4,878	519	38	10,132
REAL ESTATE	99,173	1,084	72,461	25,628	60,780
RECREATION & TOURISM	14,154	2,865	8,580	2,709	3,303
TRANSPORTATION	10,606	2,805	6,438	1,363	5,786
OTHER RETAIL TRADES	15,273	11,124	3,607	542	2,993
OTHER DISTRIBUTIVE EDUCATION	47,784	26,685	16,360	4,739	13,295
DENTAL ASSISTING	16,025	5,809	4,823	5,393	2,259
DENTAL HYGIENE(ASSOCIATE DEGREE)	6,496	6	6,445	45	66
DENTAL LABORATORY TECHNOLOGY	3,252	572	2,144	536	371
MEDICAL LABORATORY ASSISTING	13,143	2,505	9,739	899	1,225
OTHER MEDICAL LABORATORY TECHNOLOGY	4,026	144	3,633	249	699
NURSING(ASSOCIATE DEGREE)	90,733	122	88,180	2,431	10,082
PRACTICAL(VOCATIONAL)NURSING	71,366	6,453	18,643	46,270	9,505
NURSING ASSISTANCE(AIDE)	44,319	26,859	5,650	11,810	66,546
OTHER NURSING	12,101	2,544	4,712	4,845	7,481
REHABILITATION	5,775	354	5,096	325	753
RADIOLOGIC TECHNOLOGY(X-RAY)	10,789	53	9,984	752	348
MENTAL HEALTH TECHNOLOGY	10,526	202	9,333	991	862
INHALATION THERAPY	10,121	220	7,787	2,114	907
MEDICAL ASSISTANT	18,214	8,632	5,742	3,840	9,812
COMMUNITY HEALTH AIDE	7,716	6,177	1,182	357	2,343
MEDICAL EMERGENCY TECHNICIAN	14,878	394	7,509	6,975	60,285
OTHER HEALTH OCCUPATIONS EDUCATION	47,795	24,953	15,077	7,765	32,461
CARE & GUIDANCE OF CHILDREN	101,553	50,243	37,729	13,581	34,611
CLOTHING MGT., PRODUCTION, & SERVICES	31,463	24,429	4,232	2,802	15,380
FOOD MGT., PRODUCTION, & SERVICES	80,600	67,535	8,328	4,737	20,327
HOME FURN.,EQUIPMENT, & SERVICES	9,268	3,276	4,000	1,992	8,784
INSTITUTIONAL & HOME MGT. & SUP.	5,799	4,968	384	447	2,077
OTHER OCCUP. PREP. FOR HOMEMAKING	16,073	11,659	3,344	1,070	2,443
ACCOUNTING & COMPUTING OCCUPATIONS	402,004	229,944	141,563	30,497	70,807
COMPUTE & CONSOLE OPERATORS	25,703	7,209	14,798	3,696	7,320
PROGRAMMERS	62,359	11,181	46,718	4,460	5,092
OTHER BUSINESS DATA PROCESSING	79,111	33,507	32,371	13,233	19,300
FILING, OFFICE MACHINES, & GEN. OFF.	419,972	337,578	41,625	40,769	55,839
INFORMATION, COMMUNICATION OCCUP.	21,997	6,891	10,101	5,005	7,321
MATERIALS SUPPORT OCCUPATIONS	2,846	1,714	880	252	249
PERSONNEL, TRAINING, & RELATED	18,639	2,894	12,226	3,519	22,001
STENOGRAPHIC, SECRETARIAL, & RELATED	428,656	240,656	138,515	49,485	69,584
SUPERVISORY & ADMINISTRATIVE MGT.	155,540	10,487	134,926	10,127	28,059
TYPING & RELATED OCCUPATIONS	197,308	166,836	11,302	19,170	82,216
OTHER OFFICE OCCUPATIONS	52,950	37,568	12,124	3,258	11,030
ARCHITECTURAL TECHNOLOGY	25,100	1,664	21,507	1,929	2,282
AUTOMOTIVE TECHNOLOGY	8,908	559	7,737	612	570
CIVIL TECHNOLOGY	15,551	454	13,476	1,621	9,563
ELECTRICAL TECHNOLOGY	15,335	1,679	12,827	829	7,200
ELECTRONIC TECHNOLOGY	78,795	5,810	61,634	11,351	15,142
ENVIRONMENTAL-CONTROL TECHNOLOGY	6,036	218	5,072	746	978
INDUSTRIAL TECHNOLOGY	11,649	119	11,164	366	7,112
MECHANICAL TECHNOLOGY	23,590	729	19,392	3,469	2,914

TABLE 3.4 -- ENROLLMENT IN OCCUPATIONALLY SPECIFIC PROGRAMS (VEA), BY LEVEL AND BY INSTRUCTIONAL PROGRAM: 1978-79--CONTINUED

PROGRAM	TOTAL	PROGRAM LEVEL			
		GRADES 11 & 12	POST-SECONDARY	ADULT (LONG-TERM)	ADULT (SHORT-TERM)
SCIENTIFIC DATA PROCESSING	14,967	2,732	9,685	2,550	1,794
COMMERCIAL PILOT TRAINING	8,328	29	7,650	649	1,358
FIRE & FIRE SAFETY TECHNOLOGY	11,085	14	10,145	926	6,858
POLICE SCIENCE TECHNOLOGY	57,894	225	52,951	4,718	3,803
OTHER TECHNICAL EDUCATION	63,627	4,096	50,946	8,585	12,803
WATER & WASTE WATER TECHNOLOGY	2,738	3	2,299	436	2,667
AIR CONDITIONING	48,917	16,030	13,243	19,644	19,160
APPLIANCE REPAIR	12,736	7,975	1,380	3,381	1,633
BODY & FENDER REPAIR	65,761	41,660	9,723	14,378	14,653
AUTO MECHANICS	232,059	161,378	32,651	38,030	49,752
AUTOMOTIVE SPECIALIZATION	24,626	17,478	2,374	4,774	5,025
AVIATION OCCUPATIONS	22,360	6,511	9,552	6,297	6,441
COMMERCIAL ART OCCUPATIONS	44,253	16,519	24,119	3,615	4,905
COMMERCIAL PHOTOGRAPHY OCCUP.	22,031	6,523	12,071	3,437	7,314
CARPENTRY	114,062	70,438	13,240	30,384	25,179
ELECTRICITY	36,815	17,788	2,938	16,089	20,031
MASONRY	29,201	19,559	1,200	8,442	10,067
PLUMBING & PIPEFITTING	22,843	7,064	1,383	14,396	14,447
OTHER CONSTRUCTION & MAINTENANCE	84,352	50,322	10,891	23,139	30,756
CUSTODIAL SERVICES	9,495	5,791	1,377	2,327	4,265
DIESEL MECHANIC	22,255	6,470	7,785	8,000	4,037
DRAFTING OCCUPATIONS	96,773	58,352	22,947	15,474	18,203
ELECTRICAL OCCUPATIONS	39,036	18,268	4,085	16,683	37,541
ELECTRONICS OCCUPATIONS	83,775	46,916	16,938	19,921	24,192
FOREMANSHIP, SUPER., & MGT. DEVEL.	18,740	1,409	12,972	4,359	42,711
GRAPHIC ARTS OCCUPATIONS	69,162	51,515	10,083	7,564	8,580
INSTRUMENT MAINTENANCE & REPAIR	2,510	630	764	1,116	1,407
MARITIME OCCUPATIONS	4,522	1,287	1,245	1,990	3,274
MACHINE SHOP	72,802	40,284	12,683	19,835	29,755
MACHINE TOOL OCCUPATION	6,891	2,598	2,263	2,030	4,492
SHEET METAL	16,906	8,337	1,297	7,272	5,858
WELDING & CUTTING	109,299	45,038	26,860	37,401	63,839
TOOL & DIE MAKING	4,718	747	859	3,112	4,918
OTHER METALWORKING OCCUPATIONS	27,601	22,102	2,037	3,462	6,607
METALLURGY OCCUPATIONS	1,209	891	265	53	824
COSMETOLOGY	82,684	54,191	9,646	18,847	4,916
OTHER PERSONAL SERVICES	5,416	3,088	1,314	1,014	2,996
PLASTICS OCCUPATIONS	2,904	2,250	426	228	2,329
FIREMAN TRAINING	12,717	1,015	9,232	2,470	164,014
LAW ENFORCEMENT TRAINING	52,862	3,927	44,681	4,254	36,508
OTHER PUBLIC SERVICE OCCUPATIONS	19,944	3,636	13,241	3,067	45,565
QUANTITY FOOD OCCUPATIONS	34,874	22,824	5,874	6,176	7,635
REFRIGERATION	2,748	986	869	893	2,674
SMALL ENGINE REPAIR	22,995	14,694	1,973	6,328	10,884
STATIONARY ENERGY SOURCES OCCUP.	1,493	558	131	804	5,676
TEXTILE PRODUCTION & FABRICATION	21,419	11,917	3,978	5,524	12,962
UPHOLSTERING	7,145	3,007	887	3,251	6,850
WOODWORKING OCCUPATIONS	32,447	26,730	1,946	3,771	16,302
OTHER TRADE & INDUSTRIAL OCCUPATIONS	90,931	53,402	13,157	24,372	50,740
OTHER PROGRAMS,GREATER THAN 1% OF TOTAL	128,324	96,322	21,442	10,560	38,990
OTHER PROGRAMS,LESS THAN 1% OF TOTAL	31,619	28,319	2,838	462	7,948
TOTAL	5,682,297	3,039,407	1,794,179	848,711	1,943,640

NOTES: TABLE INCLUDES IMPUTED DATA.
TOTAL COLUMN EXCLUDES SHORT-TERM ADULTS.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 3.5 -- ENROLLMENT IN COOPERATIVE EDUCATION PROGRAMS, BY PROGRAM:
1978-79

PROGRAM	COOPERATIVE VOCATIONAL EDUCATION ENROLLMENT
AGRICULTURAL PRODUCTION	8,187
AGRICULTURAL SUPPLIES/SERVICES	3,679
AGRICULTURAL MECHANICS	3,278
AGRICULTURAL PRODUCTS	1,054
HORTICULTURE	3,754
RENEWABLE NATURAL RESOURCES	269
FORESTRY	468
OTHER AGRICULTURE	5,912
ADVERTISING SERVICES	1,894
APPAREL & ACCESSORIES	9,844
AUTOMOTIVE	3,416
FINANCE & CREDIT	2,213
FLORISTRY	680
FOOD DISTRIBUTION	14,622
FOOD SERVICES	17,315
GENERAL MERCHANDISE	69,702
HARDWARE, BUILDING MATERIALS, ETC.	2,344
HOME FURNISHINGS	936
HOTEL & LODGING	1,667
INDUSTRIAL MARKETING	6,441
INSURANCE	452
PERSONAL SERVICES	3,212
REAL ESTATE	3,566
RECREATION & TOURISM	2,023
TRANSPORTATION	1,353
OTHER RETAIL TRADES	5,843
OTHER DISTRIBUTIVE EDUCATION	15,796
DENTAL ASSISTING	1,100
DENTAL HYGIENE(ASSOCIATE DEGREE)	153
DENTAL LABORATORY TECHNOLOGY	127
MEDICAL LABORATORY ASSISTING	511
OTHER MEDICAL LABORATORY TECHNOLOGY	149
NURSING(ASSOCIATE DEGREE)	861
PRACTICAL(VOCATIONAL)NURSING	856
NURSING ASSISTANCE(AIDE)	3,261
OTHER NURSING	411
REHABILITATION	435
RADIOLOGIC TECHNOLOGY(X-RAY)	113
MENTAL HEALTH TECHNOLOGY	978
INHALATION THERAPY	231
MEDICAL ASSISTANT	709
COMMUNITY HEALTH AIDE	905
MEDICAL EMERGENCY TECHNICIAN	134
OTHER HEALTH OCCUPATIONS EDUCATION	6,153
CARE & GUIDANCE OF CHILDREN	8,697
CLOTHING MGT., PRODUCTION, & SERVICES	2,147
FOOD MGT., PRODUCTION, & SERVICES	15,572
HOME FURN.,EQUIPMENT, & SERVICES	449
INSTITUTIONAL & HOME MGT. & SUP.	1,659
OTHER OCCUP. PREP. FOR HOMEMAKING	6,306
ACCOUNTING & COMPUTING OCCUPATIONS	13,104
COMPUTE & CONSOLE OPERATORS	999
PROGRAMMERS	1,678
OTHER BUSINESS DATA PROCESSING	2,656
FILING, OFFICE MACHINES, & GEN. OFF.	26,000
INFORMATION, COMMUNICATION OCCUP.	1,569
MATERIALS SUPPORT OCCUPATIONS	800
PERSONNEL, TRAINING, & RELATED	3,641
STENOGRAPHIC, SECRETARIAL, & RELATED	28,418
SUPERVISORY & ADMINISTRATIVE MGT.	2,501
TYPING & RELATED OCCUPATIONS	14,021
OTHER OFFICE OCCUPATIONS	13,117
ARCHITECTURAL TECHNOLOGY	1,003
AUTOMOTIVE TECHNOLOGY	175
CIVIL TECHNOLOGY	530
ELECTRICAL TECHNOLOGY	774
ELECTRONIC TECHNOLOGY	1,330
ENVIRONMENTAL-CONTROL TECHNOLOGY	119
INDUSTRIAL TECHNOLOGY	355
MECHANICAL TECHNOLOGY	600
SCIENTIFIC DATA PROCESSING	644
COMMERCIAL PILOT TRAINING	38
FIRE & FIRE SAFETY TECHNOLOGY	87
POLICE SCIENCE TECHNOLOGY	835
OTHER TECHNICAL EDUCATION	1,421
WATER & WASTE WATER TECHNOLOGY	76
AIR CONDITIONING	1,193
APPLIANCE REPAIR	1,148
BODY & FENDER REPAIR	3,012
AUTO MECHANICS	11,317
AUTOMOTIVE SPECIALIZATION	1,872
AVIATION OCCUPATIONS	299
COMMERCIAL ART OCCUPATIONS	1,139
COMMERCIAL PHOTOGRAPHY OCCUP.	436
CARPENTRY	7,471
ELECTRICITY	1,137
MASONRY	1,264
PLUMBING & PIPEFITTING	2,109
OTHER CONSTRUCTION & MAINTENANCE	6,894
CUSTODIAL SERVICES	2,830
DIESEL MECHANIC	880
DRAFTING OCCUPATIONS	2,296
ELECTRICAL OCCUPATIONS	2,598
ELECTRONICS OCCUPATIONS	2,216
FOREMANSHIP, SUPER., & MGT. DEVEL.	1,796
GRAPHIC ARTS OCCUPATIONS	3,484
INSTRUMENT MAINTENANCE & REPAIR	262
MARITIME OCCUPATIONS	687
MACHINE SHOP	4,532
MACHINE TOOL OCCUPATION	555
SHEET METAL	1,291
WELDING & CUTTING	2,866
TOOL & DIE MAKING	119
OTHER METALWORKING OCCUPATIONS	1,974
METALLURGY OCCUPATIONS	64
COSMETOLOGY	1,720
OTHER PERSONAL SERVICES	1,121
PLASTICS OCCUPATIONS	397
FIREMAN TRAINING	337
LAW ENFORCEMENT TRAINING	991
OTHER PUBLIC SERVICE OCCUPATIONS	1,393
QUANTITY FOOD OCCUPATIONS	8,084
REFRIGERATION	145
SMALL ENGINE REPAIR	858
STATIONARY ENERGY SOURCES OCCUP.	69
TEXTILE PRODUCTION & FABRICATION	3,050
UPHOLSTERING	423
WOODWORKING OCCUPATIONS	2,730
OTHER TRADE & INDUSTRIAL OCCUPATIONS	25,681
OTHER PROGRAMS,GREATER THAN 1% OF TOTAL	43,576
OTHER PROGRAMS,LESS THAN 1% OF TOTAL	19,496
TOTAL	536,961

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 3.6 -- ENROLLMENT IN COOPERATIVE EDUCATION PROGRAMS, BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	COOPERATIVE VOCATIONAL EDUCATION ENROLLMENT
ALABAMA	13,183
ALASKA	656
ARIZONA	0
ARKANSAS	5,950
CALIFORNIA	25,352
COLORADO	8,708
CONNECTICUT	5,444
DELAWARE	2,540
DISTRICT OF COLUMBIA	1,121
FLORIDA	33,468
GEORGIA	19,855
HAWAII	2,240
IDAHO	4,026
ILLINOIS	35,412
INDIANA	772
IOWA	0
KANSAS	4,313
KENTUCKY	5,689
LOUISIANA	6,346
MAINE	1,950
MARYLAND	10,471
MASSACHUSETTS	4,320
MICHIGAN	22,210
MINNESOTA	14,636
MISSISSIPPI	4,383
MISSOURI	0
NEBRASKA	2,727
NEVADA	631
NEW HAMPSHIRE	1,008
NEW JERSEY	15,942
NEW MEXICO	2,865
NEW YORK	21,195
NORTH CAROLINA	20,205
NORTH DAKOTA	2,163
OHIO	41,041
OKLAHOMA	6,729
OREGON	8,587
PENNSYLVANIA	22,241
RHODE ISLAND	1,128
SOUTH CAROLINA	7,540
SOUTH DAKOTA	1,794
TENNESSEE	8,716
TEXAS	87,784
UTAH	7,374
VERMONT	1,083
VIRGINIA	18,079
WASHINGTON	10,304
WEST VIRGINIA	3,369
WISCONSIN	3,270
WYOMING	0
TOTAL U.S.	528,820
AMERICAN SAMOA	27
NORTHERN MARIANAS	61
GUAM	91
PUERTO RICO	7,802
TRUST TERRITORY	160
OUTLYING AREAS	8,141
U.S. AND OUTLYING AREAS	536,961

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

Table 3.7
Enrollments in the consumer and homemaking program area (VEA), by level and program: 1978-79

Program	Total	Below grade 11	Grades 11-12	Postsecondary	Adult (long-term)	Adult (short-term)
Total	3,658,475	1,363,882	1,396,653	30,095	47,790	820,055
Comprehensive homemaking	1,424,290	804,225	363,087	3,108	3,753	250,117
Child development & guidance	285,777	52,617	134,381	1,526	19,589	77,664
Clothing & textiles	348,760	97,940	130,193	1,321	3,208	116,098
Consumer education	194,027	41,724	69,872	4,520	484	77,427
Family health	19,797	2,756	6,784	0	80	10,177
Family living and parenthood education	272,827	58,753	170,603	665	471	42,335
Foods & nutrition	505,783	139,719	248,474	1,880	1,941	113,769
Home management	44,094	10,527	21,431	304	288	11,544
Housing & home furnishings	135,585	27,198	55,664	695	2,228	49,800
Other homemaking	427,535	128,423	196,164	16,076	15,748	71,124

SOURCE: U.S. Department of Education, National Center for Education Statistics, Vocational Education Data System.

Table 3.8
Distribution of vocational education enrollments (VEA), by program area:
Fiscal years 1973-1979

Instructional program area	Fiscal year						
	1973	1974	1975	1976	1977	1978	1979
	Percentage distributions						
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	11.6	11.1	10.8	10.8	10.2	9.7	9.1
Distribution	9.3	9.5	9.3	9.2	9.4	9.2	8.8
Health	5.3	5.7	6.6	7.0	7.2	7.3	7.5
Occupational home economics	4.0	5.6	4.9	4.8	5.0	4.4	5.5
Office occupations	31.3	31.4	31.5	31.7	31.7	31.8	32.5
Technical	4.6	4.5	4.8	4.9	5.0	5.1	4.5
Trade and industrial	33.9	32.1	32.2	31.7	31.5	32.6	32.1

NOTE: Enrollments in consumer and homemaking, industrial arts and "other, not elsewhere classified" categories are excluded in determining percentages. Details may not add to totals because of rounding.

SOURCES: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Reports, 1972-78; United States Department of Education, National Center for Education Statistics, Vocational Education Data System.

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Table 3.9
Number and percent change in reported enrollments (VEA), by program area: 1977-78 to 1978-79

Program area	Enrolled in 1977-78	Enrolled in 1978-79	Percent change 1977-78 to 1978-79
All programs	16,704,926	17,033,620	2.0
Agriculture	1,006,542	964,452	- 4.2
Distribution	962,009	927,929	- 3.5
Health	758,808	791,155	4.3
Occupational home economics	459,590	577,818	25.7
Office occupations	3,312,475	3,439,623	3.8
Technical	527,681	472,200	-10.5
Trade and industrial	3,402,722	3,411,796	0.3
Consumer and homemaking	3,659,441	3,658,475	0.0
Industrial arts	1,492,790	1,681,927	12.7
Other	1,122,868	1,108,245	- 1.3

SOURCES: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Reports, 1972-78; U.S. Department of Education, National Center for Education Statistics, Vocational Education Data System.

Table 3.10
Number and percent change in reported enrollments in the consumer and homemaking program area (VEA): Fiscal years 1976 and 1979

Program	Enrolled in FY 1976	Enrolled in FY 1979	Percent change FY 1976 to FY 1979
Comprehensive homemaking	1,629,107	1,424,290	- 12.6
Child development and guidance	193,300	285,777	47.8
Clothing and textiles	340,221	348,760	2.5
Consumer education	155,107	194,027	25.1
Family relations	181,517	272,827	50.3
Foods and nutrition	338,242	505,783	49.5
Home management	41,299	44,094	6.8
Housing and home furnishings	130,066	135,585	4.2
Other homemaking	506,183	447,332	- 11.6

SOURCES: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Summary Data, Vocational Education Fiscal Year 1976, 1977; U.S. Department of Education, National Center for Education Statistics, Vocational Education Data System.

Table 3.11
Distribution of enrollments within the agriculture program area (VEA); Fiscal years 1972-1979

Instructional program	Program year							
	1972	1973	1974	1975	1976	1977	1978	1979[1/]
	Percent of program area total							
Agricultural production	62.9	60.6	56.6	57.4	54.3	53.3	52.6	48.7
Agricultural supplies/services	2.7	2.9	3.1	3.0	2.8	3.0	3.3	4.6
Agricultural mechanics	14.4	15.6	14.2	13.5	14.0	13.5	13.3	16.6
Agricultural products	1.1	1.3	1.0	1.1	1.5	1.4	1.3	1.8
Ornamental horticulture	6.3	7.6	8.9	10.4	11.2	12.2	13.0	17.6
Agricultural resources	2.7	3.0	2.2	2.7	2.7	2.6	2.4	3.5
Forestry	2.0	2.0	2.4	1.9	1.9	1.9	2.2	2.7
Other	7.9	7.0	11.7	10.1	11.8	12.0	12.0	4.5

[1/] Based on occupationally specific enrollments above grade 10 only.

NOTE: Details may not add to totals because of rounding.

SOURCES: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Reports, 1972-1978; United States Department of Education, National Center for Education Statistics, Vocational Education Data System.

Table 3.12
Distribution of enrollments within the distribution program area (VEA): Fiscal years 1972-1979

Instructional program[1]	Program year							
	1972	1973	1974	1975	1976	1977	1978	1979[2]
	Percent of program area total							
Apparel and accessories	3.9	3.3	3.3	2.9	2.8	3.2	3.3	3.7
Finance and credit	4.4	4.6	4.8	6.2	6.1	5.5	5.1	5.4
Food distribution	4.5	4.4	3.8	3.8	4.0	3.7	3.9	3.9
Food services	5.3	5.8	5.1	4.9	5.3	5.2	6.0	6.0
General merchandising	32.0	32.4	30.6	32.2	32.2	32.3	29.5	30.6
Hotel and lodging	2.0	1.8	1.4	1.9	2.0	2.3	2.0	2.4
Industrial marketing	1.3	1.7	2.1	2.5	3.0	2.3	2.3	3.2
Personal services	2.8	2.6	2.4	2.6	2.0	2.1	2.0	2.1
Real estate	12.8	15.3	16.3	13.5	14.7	16.5	20.2	21.0
Recreation and tourism	2.0	2.4	1.9	2.5	2.7	2.6	2.8	2.3

[1] List represents ten largest distribution programs in program year 1978.

[2] Based on occupationally specific enrollments above grade 10 only.

SOURCES: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Reports, 1972-78; United States Department of Education, National Center for Education Statistics, Vocational Education Data System.

Table 3.13
Distribution of enrollments within the health program area (VEA): Fiscal years 1972-1979

Instructional program[1/]	Program year 1972	1973	1974	1975	1976	1977	1978	1979[2/]
	Percent of program area total							
Dental assistant	4.6	4.0	4.1	3.3	3.1	3.2	2.9	3.1
Medical lab. assistant	3.1	2.7	1.5	1.7	2.3	2.3	2.4	2.4
Nursing (assoc. degree)	19.3	18.5	17.9	16.6	15.3	15.1	15.3	17.0
Practical (vocational) nursing	24.6	22.3	17.6	15.1	14.4	13.3	12.5	13.6
Nursing assistant (aide)	17.5	17.8	16.5	17.0	17.0	15.7	15.5	18.7
Other nursing	NA	NA	NA	6.7	6.7	7.6	7.0	3.3
Mental health technology	1.2	1.6	1.6	1.7	2.3	1.9	2.0	1.9
Medical assistant	3.1	3.4	3.6	3.0	3.6	3.8	4.2	4.7
Health aide	2.5	2.4	2.4	2.9	2.2	2.1	2.1	1.7
Medical emergency technology	NA	NA	NA	7.5	7.9	9.5	11.6	12.7

NA Not applicable.

[1/] List represents ten largest health programs in program year 1978.

[2/] Based on occupationally specific enrollments above grade 10 only.

SOURCES: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Reports, 1972-78; United States Department of Education, National Center for Education Statistics, Vocational Education Data System.

Table 3.14
Distribution of enrollments within the occupational home economics program area (VEA): Fiscal years 1972-1979

Instructional program	Program year 1972	1973	1974	1975	1976	1977	1978	1979[1/]
	Percent of program area total							
Care and guidance of children	27.6	25.8	20.3	27.8	30.6	31.2	33.4	41.4
Clothing mgt. & production services	21.3	19.6	19.6	24.2	22.4	20.5	15.4	14.3
Food mgt. & production services	27.7	29.0	23.4	27.9	29.1	30.4	32.9	30.7
Home furnishings, equip., & services	7.6	6.3	5.6	7.2	7.0	6.9	6.4	5.5
Institutional & home management	2.9	3.9	3.4	3.5	2.6	3.1	3.9	2.4
Other occup. home economics	13.1	15.7	27.7	9.5	8.2	7.8	8.1	5.6

[1/] Based on occupationally specific enrollments above grade 10 only.

NOTE: Details may not add to totals because of rounding.

SOURCES: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Reports, 1972-78; United States Department of Education, National Center for Education Statistics, Vocational Education Data System, preliminary data.

Table 3.15
Distribution of enrollments within the office occupations program area (VEA): Fiscal years 1972-1979

Instructional program	Program year							
	1972	1973	1974	1975	1976	1977	1978	1979[1]
	Percent of program area total							
Accounting and computing	15.0	15.4	15.6	16.0	16.4	17.3	17.8	21.0
Business data processing occupations	6.7	6.2	5.8	6.2	6.2	6.4	6.6	8.7
Filing, office machines, clerical	16.9	17.2	18.5	18.3	19.0	22.4	21.7	21.2
Information and communication	1.0	1.2	1.1	1.4	1.3	1.3	1.4	1.3
Materials support, transportation, etc.	0.4	0.3	0.6	0.3	0.2	0.2	0.1	0.1
Personnel, training and related	0.6	0.8	1.0	1.7	1.5	1.5	1.8	1.8
Steno., secretarial and related	23.4	24.3	23.8	22.6	22.5	22.2	21.1	22.2
Supervisory and admin. mgt.	3.3	3.4	4.0	4.4	4.7	4.7	6.4	8.2
Typing and related	26.7	25.2	24.0	22.6	21.1	17.2	17.6	12.4
Other office occupations	6.0	6.0	5.8	6.5	7.0	6.7	5.4	2.9

[1] Based on occupationally specific enrollments above grade 10 only.

NOTE: Details may not add to totals because of rounding.

SOURCES: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Reports, 1972-78; United States Department of Education, National Center for Education Statistics, Vocational Education Data System.

Table 3.16
Distribution of enrollments within the technical program area (VEA): Fiscal years 1972-1979

Instructional program[1]	Program year							
	1972	1973	1974	1975	1976	1977	1978	1979[2]
	Percent of program area total							
Architectural technology	4.2	4.4	5.7	5.0	5.2	4.9	5.8	6.5
Automotive technology	2.2	2.6	1.9	2.2	2.2	2.8	2.7	2.3
Civil technology	6.0	7.2	6.8	6.8	6.0	5.5	5.7	6.0
Electrical technology	4.7	4.5	4.7	5.1	5.0	5.3	4.7	5.4
Electronic technology	19.1	18.9	19.0	18.4	17.4	16.3	17.1	22.4
Industrial technology	3.5	3.0	3.8	4.8	4.3	3.7	3.4	4.5
Mechanical technology	7.8	7.1	7.0	6.7	5.9	5.1	5.7	6.3
Scientific data technology	5.0	4.4	5.1	3.8	3.8	3.2	3.0	4.0
Fire & fire safety technology	2.6	2.8	3.6	3.7	5.1	5.5	5.5	4.3
Police science technology	13.0	14.6	15.3	17.4	18.9	19.1	20.0	14.7

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[1] List represents ten largest technical programs in program year 1978.

[2] Based on occupationally specific enrollments above grade 10 only.

SOURCES: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Reports, 1972-78; United States Department of Education, National Center for Education Statistics, Vocational Education Data System.

Table 3.17
Distribution of enrollments within the trade and industrial program area (VEA): Fiscal years 1972-1979

Instructional program[1]	Program year							
	1972	1973	1974	1975	1976	1977	1978	1979[2]
	Percent of program area total							
Automobile mechanics	9.5	10.1	10.9	9.9	11.8	11.4	10.0	10.9
Other automotive	4.0	3.9	4.5	5.8	4.9	5.4	5.9	4.3
Carpentry	4.0	4.1	4.4	4.6	4.9	4.9	4.8	5.4
Other construction & maintenance	8.7	9.2	9.8	10.2	9.5	10.0	9.3	9.6
Drafting occupations	5.3	5.2	5.1	5.1	4.9	4.6	4.5	4.5
Electrical occupations	3.4	3.9	3.5	3.8	3.1	3.3	3.5	3.0
Electronics occupations	4.1	4.0	4.3	4.3	4.5	4.5	4.3	4.2
Graphic arts occupations	2.9	2.7	2.9	3.1	3.2	3.2	3.2	3.0
Metalworking occupations	12.2	11.7	13.3	13.2	14.3	14.0	13.2	13.7
Firefighter training	6.6	7.7	4.4	2.9	2.2	2.4	5.5	6.9

[1] List represents ten largest trade and industrial education programs in program year 1978.

[2] Based on occupationally specific enrollments above grade 10 only.

SOURCES: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Reports, 1972-78; United States Department of Education, National Center for Education Statistics, Vocational Education Data System,

Table 3.18
Enrollment in vocational education, by provider and by State or outlying area: 1978

State or outlying area	Total	Public secondary schools[1]	Private secondary schools	4-Year institutions of higher education	2-Year institutions of higher education	Public noncollegiate postsecondary schools	Private noncollegiate postsecondary schools	Correspondence schools	State correctional facilities
Total	19,563,175	12,721,142	21,969	311,634	4,425,637	743,287	997,196	308,423	33,887
Alabama	238,857	167,445	189	4,726	31,663	26,117	8,667	0	50
Alaska	41,915	24,805	33	88	14,815	661	1,366	147	NA
Arizona	279,834	161,540	174	2,093	75,742	3,682	32,480	3,435	688
Arkansas	162,803	138,208	97	2,600	4,125	10,730	5,950	0	1,093
California	2,434,066	1,141,144	2,065	13,753	1,004,314	42,874	171,381	54,951	3,584
Colorado	214,992	97,778	78	5,378	60,389	14,285	36,014	711	359
Connecticut	236,436	197,915	57	4,876	16,635	2,739	13,764	0	450
Delaware	71,995	49,643	54	940	16,153	0	1,351	3,679	175
District of Columbia	61,744	22,478	74	2,280	0	803	6,125	29,759	225
Florida	1,237,052	860,794	421	10,669	261,500	64,894	32,108	4,136	2,530
Georgia	459,472	377,991	198	2,499	10,492	47,879[2]	20,030	383	NA
Hawaii	64,181	41,523	269	2,597	16,203	6	3,545	0	38
Idaho	47,649	31,031	0	2,196	8,700	4,480	1,142	0	100
Illinois	934,756	572,367	1,027	11,425	229,270	3,425	66,439	48,294	2,509
Indiana	250,170	124,270	468	11,384	93,733	5,076	12,608	131	2,500
Iowa	335,508	112,344	400	172	215,879	480	6,233	0	NA
Kansas	128,719	92,483	212	3,640	17,993	6,160	7,325	0	906
Kentucky	313,994	230,251	346	6,927	51,516	10,779	14,175	0	NA
Louisiana	297,836	245,295	485	9,943	7,844	20,911	13,107	0	251
Maine	47,245	26,363	215	1,446	15,428	1,568	2,159	0	66
Maryland	316,881	217,850	202	691	83,086	38	14,369	300	345
Massachusetts	416,726	326,338	1,205	4,772	44,129	4,520	35,052	510	200
Michigan	531,979	246,649	1,178	31,748	124,663	3,265	43,270	80,006	1,200
Minnesota	499,628	214,889	258	1,638	19,018	247,325[3]	16,180	0	320
Mississippi	184,774	146,326	198	295	33,410	1,066	2,579	600	300

Table 3.18
Enrollments in vocational education, by provider and State: 1978 -- continued

State/territory	Total	Public secondary schools[1]	Private secondary schools	4-Year institutions of higher education	2-Year institutions of higher education	Public noncollegiate postsecondary schools	Private noncollegiate postsecondary schools	Correspondence schools	State correctional facilities
Missouri	282,543	208,380	523	11,186	33,333	5,106	23,541	0	474
Montana	31,103	23,885	7	715	1,008	3,765	1,673	0	50
Nebraska	132,544	69,274	436	4,143	32,104	8,933	6,953	10,000	701
Nevada	41,305	29,702	1	382	5,518	0	5,552	0	150
New Hampshire	53,200	42,257	251	1,984	6,359	82	2,204	0	63
New Jersey	889,625	740,381	742	1,997	73,585	5,994	38,076	27,650	1,200
New Mexico	68,403	54,885	25	2,210	2,432	5,997	2,779	0	75
New York	1,619,624	1,344,006	1,930	13,978	175,850	2,084	70,380	6,396	5,000
North Carolina	658,347	283,485	158	4,851	355,937	521	12,595	0	800
North Dakota	50,391	39,381	181	597	8,961	0	1,256	0	15
Ohio	960,461	764,204	1,296	28,630	108,519	9,638	36,970	10,664	540
Oklahoma	223,713	153,194	154	5,957	36,066	15,921	12,081	0	340
Oregon	245,444	139,764	65	6,294	76,901	60	22,360	0	NA
Pennsylvania	580,537	375,693	3,614	31,721	74,051	11,953	58,190	23,965	1,350
Rhode Island	51,688	32,[illegible]85	104	3,460	10,109	724	4,696	0	110
South Carolina	304,993	171,123	95	1,885	117,749	7,618	5,972	90	461
South Dakota	38,101	28,764	224	3,650	539	1,951	2,873	0	100
Tennessee	332,199	239,594	209	12,841	46,250	17,463	15,092	0	750
Texas	1,124,100	776,230	406	9,528	202,782	94,921[4]	38,833	150	1,250
Utah	93,019	64,716	1	5,044	17,072	4,004	2,107	0	75
Vermont	36,909	29,736	241	3,114	2,894	120	804	0	0
Virginia	502,133	363,746	270	5,041	104,722	1,217	23,717	2,224	1,196
Washington	423,173	134,692	371	1,070	262,724	6,650	16,832	32	802
West Virginia	148,732	118,803	105	8,143	6,627	9,002	5,892	0	160
Wisconsin	613,299	398,360	599	1,395	198,817	4,095	9,537	210	286

Table 3.18
Enrollments in vocational education, by provider and State: 1978 -- continued

State/territory	Total	Public secondary schools 1/	Private secondary schools	4-Year institution of higher education	2-Year institution of higher education	Public noncollegiate postsecondary schools	Private noncollegiate postsecondary schools	Correspondence schools	State correctional facilities
Wyoming	24,577	18,534	58	54	4,943	5	933	0	50
Outlying area									
American Samoa	2,175	1,756	NA	0	419	NA	NA	NA	NA
Guam	6,156	5,350	NA	234	572	NA	NA	NA	NA
Puerto Rico	204,028	189,619	NA	2,691	1,839	2,000	7,879	0	NA
Trust Territory of the Pacific Islands	4,660	4,405	NA	0	255	NA	NA	NA	NA
Virgin Islands	5,342	5,279	NA	63	0	NA	NA	NA	NA
Commonwealth of Northern Marianas	1,739	1,739	NA	0	0	NA	NA	NA	NA

NA Not available.

1/ Includes individuals enrolled in secondary level programs at adult facilities. Numbers represent enrollments covered by the Vocational Education Act only.

2/ Includes 5,094 enrollments reported through the Vocational Education Data System which cannot be independently verified from other sources.

3/ Includes 209,897 enrollments reported through the Vocational Education Data System which cannot be independently verified from other sources.

4/ Includes 77,060 enrollments reported through the Vocational Education Data System which cannot be independently verified from other sources.

SOURCES: (1) United States Department of Education, National Center for Education Statistics, Vocational Education Data System, preliminary data; Survey of Noncollegiate Postsecondary Schools; Survey of Nonpublic Elementary and Secondary Schools; Higher Education General Information Survey, Earned Degrees and Other Formal Awards Conferred; (2) Carlson, Richard, National Institute of Education, Vocational Education in the Prison Setting, draft report used with permission; (3) United States Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data; and (4) estimates by the National Center for Education Statistics derived from the above sources.

TABLE 3.19 -- ENROLLMENT (VEA), BY PROGRAM LEVEL AND BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	TOTAL	PROGRAM LEVEL				
		BELOW GRADE 11	GRADES 11&12	POST-SECONDARY	ADULT (LONG-TERM)	ADULT (SHORT-TERM)
ALABAMA	206,193	83,110	75,707	17,616	29,680	15,293
ALASKA	37,908	12,112	12,178	10,884	2,818	1,636
ARIZONA	115,148	55,806	59,342	0	0	46,392
ARKANSAS	109,[illegible]2	34,983	68,503	527	8,469	30,253
CALIFORNIA	1,6[illegible]96	367,484	576,808	540,695	197,519	193,178
COLORADO	115,262	19,778	49,396	19,275	26,813	30,470
CONNECTICUT	208,379	128,810	62,782	10,153	6,634	8,937
DELAWARE	54,849	31,108	12,586	6,491	4,664	14,947
DISTRICT OF COLUMBIA	22,436	9,494	11,374	598	970	812
FLORIDA	855,567	445,276	247,329	62,840	100,122	296,857
GEORGIA	381,699	221,184	121,901	36,702	1,912	50,588
HAWAII	49,601	10,426	25,775	9,398	4,002	8,125
IDAHO	33,580	12,078	16,657	4,627	218	10,631
ILLINOIS	731,817	250,014	305,596	140,199	36,008	70,336
INDIANA	153,874	44,818	64,712	38,154	6,190	69,205
IOWA	123,322	27,133	62,728	9,487	23,974	204,901
KANSAS	87,202	26,707	37,348	9,366	13,781	24,396
KENTUCKY	206,991	92,503	91,584	4,372	18,532	85,555
LOUISIANA	208,975	95,175	88,004	0	25,796	37,601
MAINE	22,162	5,219	13,505	1,116	2,322	21,197
MARYLAND	229,766	106,033	80,026	43,707	0	48,138
MASSACHUSETTS	281,243	48,701	209,161	21,155	2,226	30,161
MICHIGAN	310,960	47,149	168,470	83,026	11,115	50,476
MINNESOTA	204,534	0	163,353	41,181	0	257,680
MISSISSIPPI	121,620	60,452	44,344	6,508	10,316	42,752
MISSOURI	203,498	0	160,749	22,759	19,990	39,045
NEBRASKA	71,972	16,669	35,560	15,527	4,216	27,619
NEVADA	31,222	12,499	13,309	3,841	1,573	3,928
NEW HAMPSHIRE	48,112	14,911	26,841	5,875	485	586
NEW JERSEY	679,858	440,524	192,597	36,329	10,408	140,210
NEW MEXICO	53,437	21,822	20,728	536	10,351	2,916
NEW YORK	1,224,819	305,789	685,748	147,364	85,918	297,121
NORTH CAROLINA	379,177	186,200	96,746	66,727	29,504	252,726
NORTH DAKOTA	35,760	8,735	21,663	3,144	2,218	11,012
OHIO	612,514	372,924	197,094	18,933	23,563	212,973
OKLAHOMA	139,350	50,808	43,944	40,122	4,476	63,623
OREGON	187,133	33,272	106,492	38,002	9,367	30,771
PENNSYLVANIA	323,592	81,475	181,113	43,557	17,447	118,095
RHODE ISLAND	35,989	10,717	21,768	3,504	0	7,329
SOUTH CAROLINA	214,161	68,387	88,854	39,615	17,305	82,292
SOUTH DAKOTA	25,750	11,073	11,634	0	3,043	3,051
TENNESSEE	222,414	101,294	73,106	28,739	19,275	62,696
TEXAS	777,451	320,339	253,576	154,223	49,313	296,571
UTAH	83,583	32,630	30,848	19,354	751	2,209
VERMONT	17,667	5,895	11,598	0	174	12,069
VIRGINIA	330,494	77,229	195,905	35,864	21,496	120,475
WASHINGTON	238,852	0	134,692	46,596	57,564	165,214
WEST VIRGINIA	81,167	21,796	43,535	12,009	3,827	49,645
WISCONSIN	469,523	378,639	14,365	44,918	31,601	131,749
WYOMING	19,022	8,160	10,374	343	145	1,023
TOTAL U.S.	13,046,269	4,809,340	5,332,080	1,946,758	958,091	3,761,465
AMERICAN SAMOA	2,175	972	759	414	30	0
NORTHERN MARIANAS	1,671	1,427	244	0	0	0
GUAM	5,461	3,136	1,527	292	506	461
PUERTO RICO	168,313	115,799	39,742	1,839	10,933	23,145
TRUST TERRITORY	4,660	2,863	1,542	255	0	0
OUTLYING AREAS	182,280	124,197	43,814	2,800	11,469	23,606
U.S. & OUTLYING AREAS	13,228,549	4,933,537	5,375,894	1,949,558	969,560	3,805,071

NOTES: TABLE INCLUDES IMPUTED DATA.
TOTAL COLUMN EXCLUDES SHORT-TERM ADULTS.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 3.20 -- ENROLLMENT IN OCCUPATIONALLY SPECIFIC PROGRAMS (VEA), BY LEVEL AND BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	TOTAL	PROGRAM LEVEL			
		GRADES 11 & 12	POST-SECONDARY	ADULT (LONG-TERM)	ADULT (SHORT-TERM)
ALABAMA	101,818	58,206	15,401	28,211	14,677
ALASKA	21,611	8,776	10,249	2,586	1,636
ARIZONA	24,146	24,146	0	0	0
ARKANSAS	35,870	26,874	527	8,469	20,170
CALIFORNIA	1,076,944	372,787	519,277	184,880	164,006
COLORADO	81,625	35,910	19,006	26,709	20,130
CONNECTICUT	52,287	35,704	10,153	6,430	8,937
DELAWARE	17,988	6,833	6,491	4,664	10,947
DISTRICT OF COLUMBIA	12,942	11,374	598	970	812
FLORIDA	248,572	122,541	62,407	63,624	92,305
GEORGIA	113,731	86,651	25,168	1,912	0
HAWAII	31,991	18,591	9,398	4,002	2,803
IDAHO	14,026	9,558	4,250	218	8,503
ILLINOIS	352,263	216,657	104,924	30,682	57,382
INDIANA	67,247	34,573	28,374	4,300	28,890
IOWA	58,061	26,736	9,487	21,838	3,965
KANSAS	43,965	20,818	9,366	13,781	23,209
KENTUCKY	63,793	50,475	1,360	11,958	62,518
LOUISIANA	77,766	54,261	0	23,505	34,678
MAINE	12,261	8,987	972	2,302	21,137
MARYLAND	100,113	56,406	43,707	0	39,671
MASSACHUSETTS	69,816	55,994	11,611	2,211	20,141
MICHIGAN	186,395	114,434	63,356	8,605	46,133
MINNESOTA	141,137	99,956	41,181	0	210,789
MISSISSIPPI	41,734	24,910	6,508	10,316	42,752
MISSOURI	107,064	67,482	21,671	17,911	34,398
NEBRASKA	37,138	18,925	13,997	4,216	19,356
NEVADA	11,188	5,956	3,841	1,391	3,752
NEW HAMPSHIRE	11,133	8,168	2,758	207	264
NEW JERSEY	91,591	44,854	36,329	10,408	0
NEW MEXICO	23,727	12,840	536	10,351	1,046
NEW YORK	561,630	329,511	146,511	85,608	27,192
NORTH CAROLINA	166,718	70,487	66,727	29,504	213,695
NORTH DAKOTA	19,030	13,668	3,144	2,218	8,106
OHIO	181,588	139,092	18,933	23,563	176,937
OKLAHOMA	67,573	30,199	32,898	4,476	20,760
OREGON	78,571	31,202	38,002	9,367	6,931
PENNSYLVANIA	195,543	138,308	40,962	16,273	27,543
RHODE ISLAND	18,087	14,583	3,504	0	7,329
SOUTH CAROLINA	105,020	57,280	33,795	13,945	0
SOUTH DAKOTA	9,723	6,680	0	3,043	2,465
TENNESSEE	98,965	51,088	28,681	19,196	95,970
TEXAS	339,310	135,928	154,223	49,159	139,810
UTAH	44,220	24,738	19,142	340	1,066
VERMONT	9,030	8,856	0	174	5,762
VIRGINIA	154,257	96,934	35,864	21,459	65,344
WASHINGTON	151,349	77,568	46,596	27,185	143,434
WEST VIRGINIA	50,152	34,355	12,009	3,788	21,177
WISCONSIN	62,629	14,365	27,142	21,122	7,815
WYOMING	3,491	3,003	343	145	416
TOTAL U.S.	5,646,849	3,018,228	1,791,379	837,242	1,934,855
AMERICAN SAMOA	1,170	726	414	30	0
NORTHERN MARIANAS	178	178	0	0	0
GUAM	1,382	584	292	506	461
PUERTO RICO	31,239	18,467	1,839	10,933	8,324
TRUST TERRITORY	1,479	1,224	255	0	0
OUTLYING AREAS	35,448	21,179	2,800	11,469	8,785
U.S. AND OUTLYING AREAS	5,682,297	3,039,407	1,794,179	848,711	1,943,640

NOTES: TABLE INCLUDES IMPUTED DATA.
TOTAL COLUMN EXCLUDES SHORT-TERM ADULTS.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 3.21 -- ENROLLMENT (VEA), BY INSTRUCTIONAL PROGRAM AREA AND BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	TOTAL	AGRI-CULTURE	DISTRI-BUTION	HEALTH	CONS. & HMMKG	OCCUP. HOME ECON	IND. ARTS	OFFICE OCCUP.	TECH-NICAL	TRADE & INDUS	OTHER NEC
ALABAMA	221,486	32,622	7,952	9,642	54,120	6,512	3,249	35,291	1,850	65,511	4,729
ALASKA	39,620	476	2,667	1,136	5,096	890	1,041	13,238	1,438	10,621	3,017
ARIZONA	161,540	6,089	16,385	4,507	60,243	4,706	12,010	20,061	362	14,465	22,792
ARKANSAS	138,735	21,395	5,212	8,562	42,129	2,260	2,053	19,424	588	26,045	11,667
CALIFORNIA	1,869,684	77,479	138,832	70,575	274,100	61,941	193,093	582,414	79,833	376,763	14,654
COLORADO	145,732	4,159	5,757	7,968	35,514	7,022	0	38,604	10,035	25,543	11,130
CONNECTICUT	209,316	1,999	4,778	4,210	87,402	1,950	24,704	43,615	1,981	32,733	5,866
DELAWARE	65,796	2,720	1,563	2,341	3,367	4,990	11,352	14,086	2,219	17,715	5,443
DISTRICT OF COLUMBIA	23,248	129	876	333	803	8,342	6,349	3,950	0	2,466	0
FLORIDA	1,152,424	55,184	71,313	76,365	111,002	142,676	45,296	281,156	26,593	264,123	80,716
GEORGIA	432,287	25,038	11,762	13,888	101,800	8,440	67,209	98,218	4,215	70,955	50,762
HAWAII	57,726	2,765	3,713	857	16,745	2,067	1,593	14,950	1,272	12,256	1,508
IDAHO	44,211	4,974	2,396	1,795	15,200	291	816	7,813	304	9,309	1,313
ILLINOIS	802,153	35,868	58,857	39,960	40,000	81,466	0	254,827	23,276	209,028	18,071
INDIANA	223,079	27,148	7,695	10,223	48,646	3,265	0	23,615	13,558	74,438	14,497
IOWA	328,223	36,004	14,008	72,765	100,133	12,196	48	34,562	4,289	40,118	10,100
KANSAS	111,598	10,545	5,347	9,009	36,008	3,574	3,723	12,023	982	30,291	96
KENTUCKY	292,546	22,295	12,432	6,869	78,422	3,326	9,135	30,870	605	79,131	49,461
LOUISIANA	246,576	20,854	8,136	9,737	56,996	3,026	29,505	76,973	1,196	61,525	678
MAINE	43,359	790	2,054	6,469	9,749	839	0	5,782	1,453	15,075	348
MARYLAND	277,904	4,997	9,345	10,052	101,433	1,723	0	84,649	15,198	38,596	13,259
MASSACHUSETTS	311,404	3,561	10,590	8,210	43,036	4,070	73,107	95,449	6,775	55,094	11,512
MICHIGAN	361,036	15,003	31,807	22,241	89,090	13,439	0	71,464	23,449	86,339	8,204
MINNESOTA	462,214	56,147	25,937	29,951	110,288	20,407	0	48,860	10,267	160,357	0
MISSISSIPPI	164,372	22,147	8,125	4,482	40,700	3,224	25,007	14,386	2,263	42,681	1,353
MISSOURI	242,543	22,339	15,406	9,408	86,715	5,382	0	26,884	7,738	52,305	14,346
NEBRASKA	99,591	9,363	5,601	6,648	31,312	1,840	0	17,221	0	22,137	5,389
NEVADA	35,150	1,270	1,178	636	3,677	314	1,288	10,520	1,435	11,898	2,934
NEW HAMPSHIRE	48,698	2,545	1,986	1,945	10,615	1,281	13,515	7,064	987	8,130	630
NEW JERSEY	820,068	3,680	21,245	17,101	144,687	5,285	340,056	144,316	19,601	121,947	2,152
NEW MEXICO	56,353	4,778	3,028	1,831	13,845	3,844	9,005	7,005	568	10,573	1,676
NEW YORK	1,521,940	16,824	37,665	41,215	479,130	12,716	386,059	357,012	40,453	150,950	0
NORTH CAROLINA	631,903	31,069	41,844	67,595	91,977	23,644	15,630	76,221	20,910	152,953	110,052
NORTH DAKOTA	46,772	7,627	2,759	1,345	14,975	936	3,099	6,426	1,016	8,589	0
OHIO	825,487	44,421	63,886	38,722	158,555	15,194	0	58,422	5,665	124,842	315,780
OKLAHOMA	202,973	30,680	7,538	8,055	34,057	3,699	1,019	28,339	9,481	56,401	23,708
OREGON	217,904	7,976	12,055	7,865	48,971	2,579	50,666	43,001	5,756	38,877	98
PENNSYLVANIA	441,687	21,091	16,374	26,758	73,562	10,530	1,226	101,670	19,399	152,130	18,939
RHODE ISLAND	43,318	648	765	1,297	5,887	987	8,329	15,410	1,053	6,653	2,289
SOUTH CAROLINA	296,453	16,623	8,083	6,996	55,815	3,056	7,175	49,084	9,741	45,888	94,000
SOUTH DAKOTA	28,801	4,890	1,280	1,203	18,411	261	0	1,529	0	8,667	560
TENNESSEE	285,110	16,752	11,290	12,780	49,462	7,806	30,516	45,166	15,526	84,336	11,476
TEXAS	1,074,022	116,234	78,778	48,454	350,604	32,702	55,620	106,082	37,176	179,984	76,388
UTAH	85,792	4,284	6,544	3,611	12,496	2,885	7,180	18,582	1,051	27,207	2,238
VERMONT	29,736	1,785	866	611	7,814	512	0	5,183	301	12,039	625
VIRGINIA	450,969	35,504	41,710	7,368	86,414	6,585	55,010	93,592	9,318	71,807	43,661
WASHINGTON	404,066	22,389	30,954	16,825	102,200	16,568	4,635	75,450	15,171	99,650	20,220
WEST VIRGINIA	130,812	5,213	4,494	12,908	21,012	1,901	0	33,563	4,052	36,343	10,526
WISCONSIN	601,272	38,821	29,563	24,458	131,291	13,920	125,027	159,388	9,006	60,764	9,026
WYOMING	20,045	2,091	1,134	456	3,426	35	4,524	6,663	86	1,292	336
TOTAL U.S.	16,827,734	959,205	913,645	788,830	3,594,446	577,032	1,608,951	3,422,133	469,383	3,386,258	1,107,857
AMERICAN SAMOA	2,175	15	57	85	513	0	492	654	67	292	0
NORTHERN MARIANAS	1,671	401	0	0	371	0	269	50	0	565	15
GUAM	5,922	49	89	0	1,866	0	1,734	860	272	960	92
PUERTO RICO	191,458	4,168	14,138	2,240	59,739	780	70,274	15,862	2,478	21,783	0
TRUST TERRITORY	6,660	614	0	0	1,550	6	207	64	0	1,930	281
OUTLYING AREAS	205,886	5,247	14,284	2,325	64,035	786	72,976	17,490	2,817	25,530	388
U.S. & OUTLYING AREAS	17,033,620	964,452	927,929	791,155	3,658,475	577,818	1,681,927	3,439,623	472,200	3,411,796	1,108,245

NOTES: TABLE INCLUDES IMPUTED DATA.
TOTAL COLUMN INCLUDES SHORT-TERM ADULTS.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

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Table 3.22
Enrollment in vocational education programs (VEA), by State or outlying area: Fiscal years 1978 and 1979

State or outlying area	Enrollments reported in FY 1979	Enrollments reported in FY 1978	Percent change FY 1978 to FY 1979
Total	17,033.619	16,704,976	3.4
Alabama	221,486	219,807	0.8
Alaska	39,620	42,820	- 7.5
Arizona	161,540	244,912	-34.0
Arkansas	138,735	146,764	- 5.5
California	1,869,684	2,094,199	-10.7
Colorado	145,732	146,067	- 0.2
Connecticut	209,316	161,932	29.3
Delaware	65,796	67,446	- 2.4
District of Columbia	23,248	17,778	30.8
Florida	1,152,424	997,309	15.6
Georgia	432,287	411,467	5.1
Hawaii	57,726	63,602	- 9.2
Idaho	44,211	51,895	-14.8
Illinois	802,153	721,226	11.2
Indiana	223,079	196,065	13.8
Iowa	328,223	312,805	4.9
Kansas	111,598	115,311	- 3.2
Kentucky	292,546	264,480	10.6
Louisiana	246,576	259,385	- 4.9
Maine	43,359	54,079	-19.8
Maryland	277,904	349,308	-20.4
Massachusetts	311,404	241,822	28.8
Michigan	361,036	379,631	- 4.9
Minnesota	462,214	438,774	5.3
Mississippi	164,372	185,946	-11.6
Missouri	242,543	232,187	4.5
Montana	NA	23,885	NA
Nebraska	99,591	100,504	- 0.9
Nevada	35,150	29,070	20.9
New Hampshire	48,698	52,910	- 8.0
New Jersey	820,068	927,157	-11.6
New Mexico	56,353	68,577	-17.8
New York	1,521,940	1,414,971	7.6
North Carolina	631,903	621,236	1.7
North Dakota	46,772	59,567	-21.5

Table 3.22
Enrollment in vocational education programs (VEA), by State or outlying area: Fiscal years 1978 and 1979 -- continued

State or outlying area	Enrollments reported in FY 1979	Enrollments reported in FY 1978	Percent change FY 1978 to FY 1979
Ohio	825,487	803,335	2.8
Oklahoma	202,973	175,083	15.9
Oregon	217,904	226,878	- 4.0
Pennsylvania	441,687	434,310	1.7
Rhode Island	43,318	63,924	-32.2
South Carolina	296,453	285,898	3.7
South Dakota	28,801	30,092	- 4.3
Tennessee	285,110	295,996	- 3.7
Texas	1,074,022	1,046,710	2.6
Utah	85,792	82,545	3.9
Vermont	29,736	25,958	14.6
Virginia	450,969	430,363	4.8
Washington	404,066	385,385	4.8
West Virginia	130,812	124,613	5.0
Wisconsin	601,272	342,813	75.4
Wyoming	20,045	34,229	-41.4
Outlying area			
American Samoa	2,175	2,093	3.9
Guam	5,922	NA	NA
Puerto Rico	191,458	187,434	2.1
Trust Territory of the Pacific Islands	4,660	4,913	- 5.1
Virgin Islands	NA	5,279	NA
Commonwealth of Northern Marianas	1,671	2,181	-20.3

NA Not available.
SOURCES: United States Department of Education, National Center for Education Statistics, Vocational Education Data System; U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Report, 1978.

Table 3.23
Occupationally specific vocational enrollment (VEA), in grades 11 and 12 as a percent of all enrollment in grades 11 and 12, by State or outlying area: 1978-79

State or outlying area	Total enrollment (vocational/ nonvocational)	Occupationally specific vocational enrollment	Vocational as a percent of total enrollment
Alabama	108,579	58,206	53.6
Alaska	12,646	8,776	69.4
Arizona	71,005	24,146	34.0
Arkansas	64,209	26,874	41.9
California	614,934	372,787	60.6
Colorado	85,928	35,910	41.8
Connecticut	90,811	35,704	39.3
Delaware	17,688	6,833	38.6
District of Columbia	13,989	11,374	81.3
Florida	213,246	122,541	57.5
Georgia	NA	86,651	NA
Hawaii	24,834	18,591	74.9
Idaho	30,414	9,558	31.4
Illinois	314,303	216,657	68.9
Indiana	167,880	34,573	12.1
Iowa	94,501	26,736	28.3
Kansas	69,535	20,818	29.9
Kentucky	93,340	50,475	54.1
Louisiana	108,574	54,261	50.0
Maine	35,887	8,987	25.0
Maryland	121,525	56,406	46.4
Massachusetts	169,722	55,994	33.0
Michigan	288,843	114,403	39.6
Minnesota	142,980	99,956	69.9
Mississippi	64,899	24,910	38.4
Missouri	143,260	67,482	47.1
Montana	26,591	7,169 1/	27.0
Nebraska	49,951	18,925	37.9
Nevada	21,627	5,956	27.5
New Hampshire	25,455	8,168	32.1
New Jersey	208,393	44,854	21.5
New Mexico	43,317	12,840	29.6
New York	467,656	329,511	70.5
North Carolina	158,742	70,487	44.4
North Dakota	22,120	13,668	61.8

Table 3.23
Occupationally specific vocational enrollment (VEA), in grades 11 and 12 as a percent of all enrollment in grades 11 and 12, by State or outlying area: 1978-79 -- continued

State or outlying area	Total enrollment (vocational/ nonvocational)	Occupationally specific vocational enrollment	Vocational as a percent of total enrollment
Ohio	326,826	139,092	42.6
Oklahoma	88,628	30,199	34.1
Oregon	72,376	31,202	43.1
Pennsylvania	326,340	138,308	42.4
Rhode Island	24,829	14,583	58.7
South Carolina	84,978	57,280	67.4
South Dakota	23,497	6,680	28.4
Tennessee	113,324	51,088	45.1
Texas	386,325	135,928	35.2
Utah	46,336	24,738	53.4
Vermont	14,727	8,856	60.1
Virginia	148,024	96,934	65.5
Washington	124,964	77,568	62.1
West Virginia	51,398	34,355	66.8
Wisconsin	158,076	14,365	9.1
Wyoming	13,470	3,003	22.3
Outlying area			
American Samoa	NA	726	NA
Guam	NA	584	NA
Puerto Rico	80,397	18,467	23.0
Trust Territory of the Pacific Islands	NA	1,224	NA
Virgin Islands	1,690	1,109 1/	65.6
Commonwealth of Northern Marianas	462	178	38.5

NA Not available.

1/ No data supplied in 1978-79. Figures imputed from 1977-78 data.

SOURCE: United States Department of Education, National Center for Education Statistics, Fall 1978 Local Education Agency Directory File, unpublished data; and Vocational Education Data System, preliminary data.

Chapter 4

Profiles of Vocational Students

The characteristics of persons attending schools offering vocational education provide insights into student needs served by different providers. In some cases, demographic profiles of students also underscore institutional differences, suggesting how institutions respond to the needs of particular groups of students. A review of student characteristics relates these differences to institutional providers and permits consideration of the issues of access and stereotyping.

A variety of student needs are served by vocational offerings. Detailed profiles of students attending two types of provider institutions are considered here, high schools and noncollegiate postsecondary schools. While comparable profiles for students at other provider institutions would be useful, such information is not available. Nonetheless, existing data permit several useful observations. The information on high school students is particularly valuable because it permits comparisons of students in vocational programs with students in other high school program areas.

The earlier chapters that examined provider institutions found comprehensive and vocational high schools and area vocational centers to be the principal providers of secondary vocational instruction. Base year data from two longitudinal studies provide information on vocational education students at comprehensive and vocational high schools. Comparisons of profiles from these two studies not only demonstrate consistent interest in vocational education, but also suggest the impact of demographic and social change on student characteristics.

High school students in vocational programs may be compared with those enrolled in either academic or general high school programs. In several ways, vocational education students differ from high school students in academic programs, although they differ little from students in general programs.

Profiles of secondary students attending all types of high schools (comprehensive or vocational) are available for the 1972 and 1980 high school graduating classes. By 1980, more than 45 percent of high school seniors in each of the three high school programs lived in communities characterized as suburban (table 4.1). Of the remaining students in each group, a slightly higher share of the students in vocational programs lived in rural areas than did students in academic programs: 31.8 percent of the total compared with 25.3 percent. The lack of large differences in the geographic locations of students in 1980 contrasts with observed differences 8 years earlier, 1972. At that time, students in vocational programs were more likely to live in rural or farming communities than students in academic programs. In 1972, over 28 percent of all vocational students lived in rural communities, compared with less than 16 percent of students in academic programs (table 4.2). And only a small proportion, 3.3 percent, of vocational students lived in suburbs.

The rising level of educational attainment of the adult population is another demographic characteristic evident from a review of the attainment levels of students' fathers. Among those from vocational programs, in 1972 there were 42.4 percent whose fathers had not completed high school (table 4.3). By 1980, only 25.3 percent reported that their fathers had not finished high school (table 4.4). Higher proportions of fathers in all program areas had completed college or obtained advanced degrees in 1980 than in 1972. In both years, fathers of vocational students had lower educational attainment in many cases than fathers of students in academic programs.

Vocational students had lower scores on series' of standardized survey tests measuring skills in several areas in 1972 as well as in 1980. Most scores for students in academic programs averaged from one-half to one standard deviation higher than scores for those in vocational programs (tables 4.5 and 4.6).

Work experiences figured more prominently in the activities of all high school students in 1980 than they did in 1972. In 1980, more than 30 percent of the students from each high school program worked 22 hours or more per week (table 4.7). In comparison, only students in general or vocational programs worked as much per week in 1972 (table 4.8). Of particular interest are the higher proportions of students in each high school program area who reported working at least 30 hours per week. While only 6.4 percent of academic students worked that amount in 1972, by 1980, 18.9 percent of academic students worked 30 hours or more. The proportion of vocational students working 30 hours rose also, from 15.4 percent in 1972 to 25.7 percent in 1980.

The jobs held by students in 1972 were more likely to be related to studies for vocational students than for academic students (33.3 percent compared with 11.3 percent). Vocational students with jobs tended to work mostly during the week while academic students worked mostly during weekends (chart 4.1).

These findings suggest that high school vocational programs historically have served as entry paths to occupations in some areas. Reviews of activities pursued by these students following their high school years, presented in a later chapter of the report, will reinforce this observation. In those vocational program areas where high school training is not available, it would be expected that postsecondary training would be a necessary prerequisite to job entry for the occupations they serve.

Postsecondary training could be expected to serve other purposes as well. Postsecondary programs offer opportunities for persons to not only obtain training that will permit them to enter the labor force but also to change occupations, reenter the labor force after having withdrawn from it for some reason, or supplement earlier training with additional or refresher training. Profiles of students from one portion of the postsecondary universe, noncollegiate schools offering occupational programs, provide a basis for reviewing the validity of these assertions.

The data on high school students discussed earlier describe for the most part young people of the traditional age group, 14 to 19 year-olds. Some secondary school programs and especially postsecondary schools, in contrast, may serve adults of any age. The age distribution of students in noncollegiate postsecondary schools reveals that a substantial share of enrollments in these schools is over the age of 30. In public noncollegiate postsecondary schools, 24.1 percent were over 30; in private noncollegiate schools, a smaller 17.7 percent were over 30 (chart 4.2 and table 4.9). In both public and private schools, a larger proportion of women than of men were under 20. The proportion of females enrolled who were in the 35-49 age category slightly exceeded that of males. These figures support the contention that males utilize training opportunities at these schools to pursue early career objectives or to supplement past training. Females may use opportunities for different objectives, namely, to obtain labor force reentry skills.

While the majority of the noncollegiate enrollments are full-time, a sizeable share are part-time. Part-time enrollments made up 35.8 percent of all public school enrollments, 28.5 percent of private school enrollments (table 4.10). These students are also engaged in other activities, such as work or homemaking. Work is important to a sizeable proportion. Employment of some type is reported by almost 48 percent of the students; of the many possible occupational categories for current jobs, clerical and sales and service occupations are cited most frequently (table 4.11). Enrollment changes since 1974 show that the proportion of women noncollegiate enrollments have increased slightly, with larger increases in public (from 41.5 to 46.9 percent) than in private schools (table 4.12).

The overwhelming majority of students in noncollegiate postsecondary schools (91.7 percent) have completed high school, and in many cases have received additional education. Their educational

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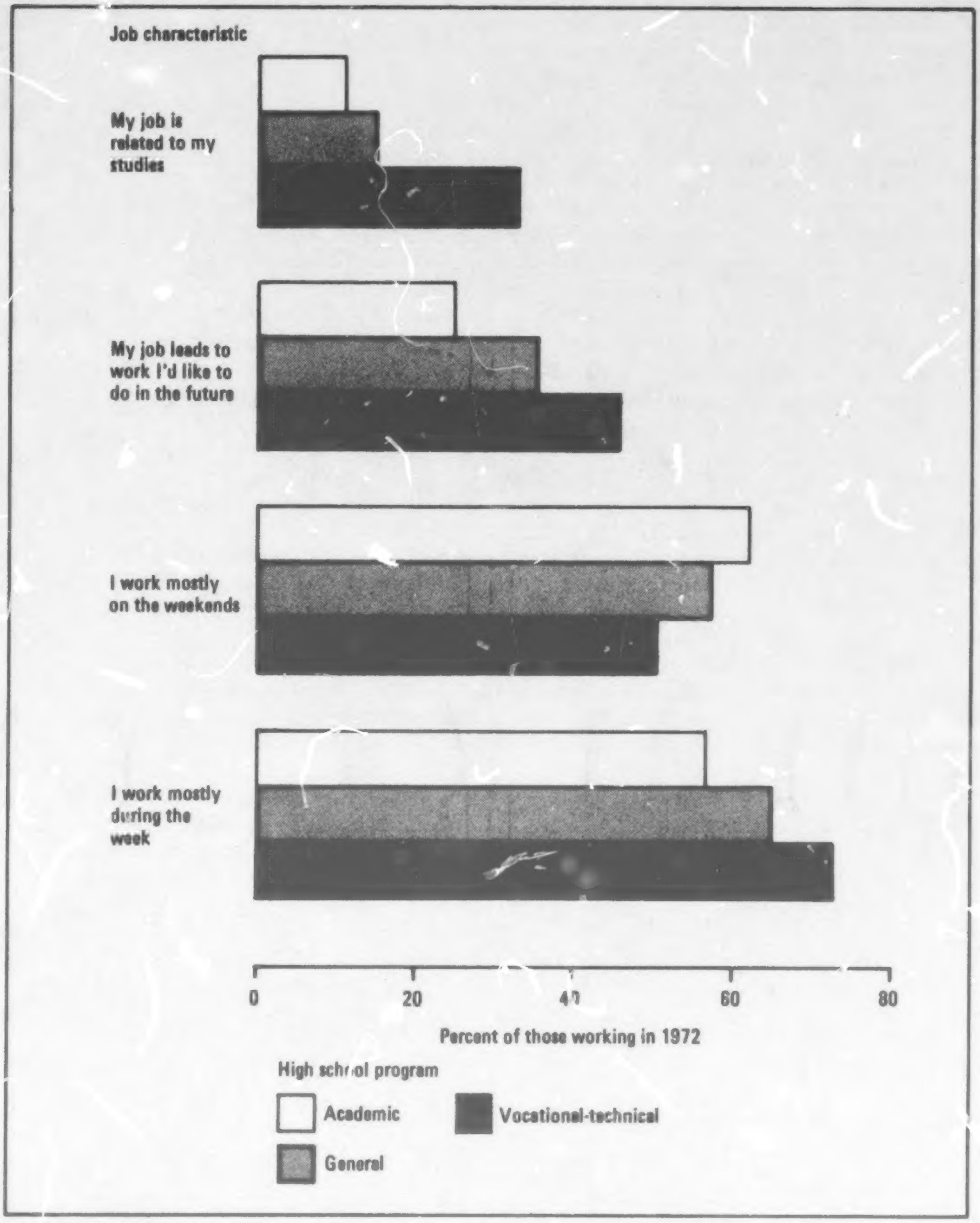
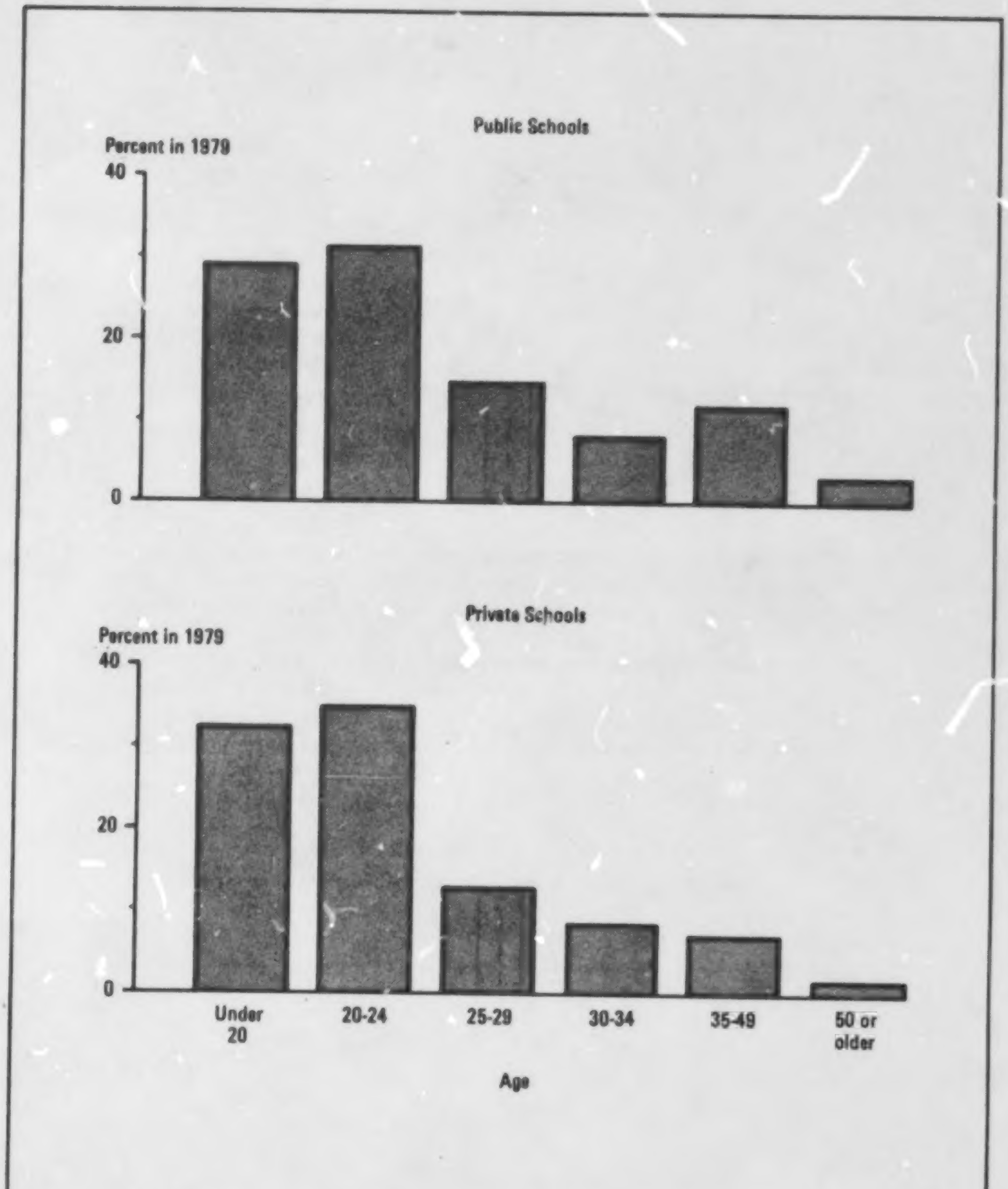
Chart 4.1
Characteristics of Jobs Held by High School Seniors



SOURCE: Table 4.8

Chart 4.2
Age of Students in Noncollegiate Postsecondary Schools



SOURCE: Table 4.9

accomplishments considerably exceed, on average, those of their parents. Almost one-third of the students reported that their parents (32.6 percent of mothers and 35.6 percent of fathers) had less than a high school education (table 4.11).

The substantial share of students now enrolled in noncollegiate postsecondary programs who have received additional training or education past high school also suggests that vocational training provides opportunities for occupational reentry or occupational changes. More than one-fourth of all the students in these noncollegiate schools (27.7 percent) reported some prior college enrollment or training. More than five percent of all students had already received associate or bachelor of arts degrees. Scrutiny of these students by the area of their current program shows that the highest proportions of students with college degrees are found in the program areas of Distribution and Technical, where over six percent of the students have completed at least 4 years of college (table 4.13). The Health program area is also characterized by higher than average educational attainment of students, with 7.7 percent of students having associate of arts degrees or higher attainments.

These profiles of a portion of the postsecondary population support the view that postsecondary training serves a wider variety of training needs, and probably a more heterogeneous clientele, than does secondary training. Comparisons of students in different types of schools and of the variety of offerings will emphasize the diversity of vocational education providers and will provide a better basis for considering the future educational and labor force career paths of young people.

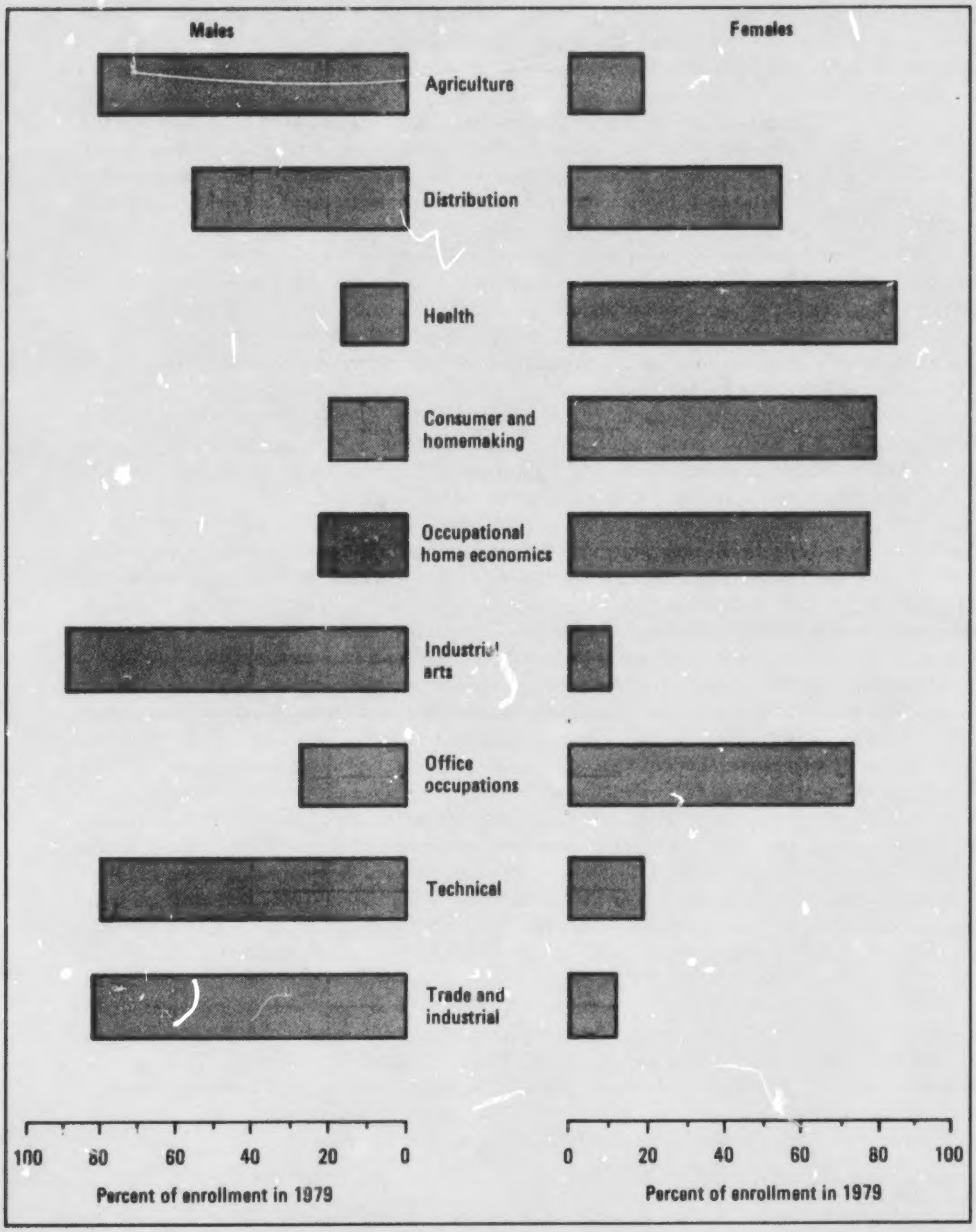
Student Characteristics and Institutional Types

Considerable attention has been directed to assessing the opportunities vocational education provides for females and for racial and ethnic minorities. Enrollment patterns by sex and by racial/ethnic group give one measure of access not only to vocational training but, in many cases, to occupational opportunities as well.

The distribution of enrollments in program areas by sex reveal single sex concentration by program area. With the exception of the Distribution area, where total enrollments in all institutions in 1978 are almost evenly divided (46.4 percent male, 53.6 percent female), each program area displays considerable imbalance (chart 4.3 and table 4.14). The remaining program areas have between three-fourths and ninety percent of their enrollments comprised of one sex. Females are concentrated in Health, Consumer and Homemaking, Occupational Home Economics, and Office Occupations. Males are predominant in Agriculture, Industrial Arts, Technical, and Trade and Industrial areas.

The pattern of single-sex dominance by program area has lessened slightly over time. Data on enrollments in VEA programs show similar patterns to those described above, but with some changes since 1972. Of those areas that display high percentages of female enrollments, the proportion of male enrollments has increased the most in Consumer and Homemaking, from 7.9 to 20.6 percent of enrollments in the area. Females still were reported to comprise a sizeable 79.4 percent majority of enrollments in the field in 1978 (table 4.15). The area of Office Occupations displayed virtually no change, with just over a three percentage point difference (76.3 to 73.5 percent females) between 1972 and 1979. Of the areas where males have the great majority of enrollments, the percentage growth of female enrollments has been greatest in Agriculture (the smallest program area in enrollment size) and the least in Trade and Industrial (the largest program area). There has been almost a 14 percentage point increase in females in Agriculture (5.3 to 19.2 percent), but only a 3.3 percentage point increase in Trade and Industrial (11.6 to 14.9 percent). Other areas, excluding Industrial Arts (for which data are not available) displayed intermediate amounts of change.

Chart 4.3
Sex Distribution of Vocational Students by Program Area



SOURCE: Table 4.14

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The enrollments of minority students show concentration in some areas, though not the imbalance characteristic of enrollments by sex. Data on racial/ethnic distributions of students are available from both VEDS and the Office for Civil Rights (OCR) for fall 1979. While these two sources examine slightly different vocational education populations, one considering programs under the VEA and the other enrollments in institutions offering five or more programs, the results from the two sources together offer complementary and comprehensive data on student characteristics. Data from VEDS provide numbers on total enrollments by State and on occupationally specific enrollments by State and by instructional program. Data from OCR permit the examination of total enrollments by program area for the institutions included.

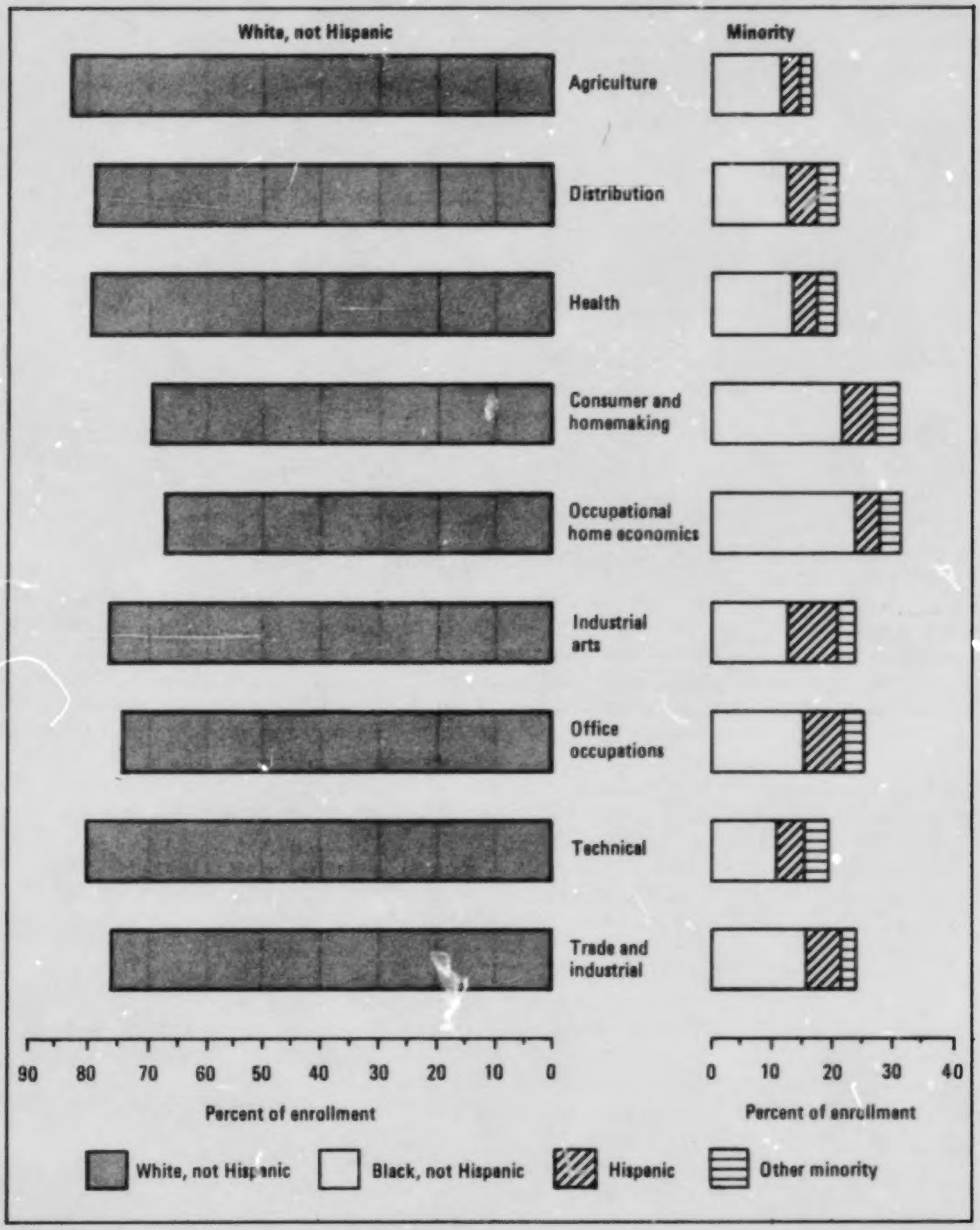
A summary of data from OCR shows that the predominantly female program areas of Consumer and Homemaking and Occupational Home Economics have the largest share of total enrollments from minorities, 30.2 and 31.2 percent, respectively (table 4.16 and chart 4.4). Next in order of high minority enrollments is Office Occupations, also a traditionally female area. The Trade and Industrial area has the largest minority enrollment of those areas with male concentrations, with 23.8 percent of enrollments from minorities. Agriculture has the smallest share of minority enrollments of any program area, with 16.7 percent. An examination of female and minority enrollments simultaneously shows the interrelationships in these enrollment patterns (chart 4.5).

The distribution of minority enrollments in occupationally specific programs is very similar to the patterns just presented for total enrollment. Occupational Home Economics has the largest share of minority enrollment in occupationally specific programs, 34.6 percent in 1979 (table 4.17). Office Occupations remained second in order of minority enrollment, with 27.7 percent. Of the areas with traditionally high male enrollment, Trade and Industrial had the highest minority enrollment in occupationally specific programs, 23.3 percent. Agriculture remained lowest in minority enrollment, with 12.2 percent.

These numbers make it possible to consider the extent to which minorities are receiving training that will permit them to enter particular occupational areas. Before exploring further the minority enrollments in particular program areas, it is useful to first establish the proportions of minorities in the population. Available figures on the proportions of minorities in the population and of minorities enrolled in school do not use identical reporting categories and, therefore, provide only a general context for the examination of minority enrollments in vocational education. Available statistics report population by race and population by ethnicity, but not population by race and ethnicity. Hence statistics on minorities in the population do not include whites who are of Hispanic origin. Population statistics indicate that minorities comprise somewhat more than 16.1 percent of the 14- to 17-year-old population. Among 18- to 24-year-olds, 14.5 percent, and among 25- to 34-year olds, 13.1 percent of all persons in the population are minorities. Addition of the whites of Hispanic origin to the minority count would obviously yield somewhat larger figures for minorities. Minorities in the population hence may be estimated at between 19 and 21 percent of the younger population group (14 to 17), and around 17 percent of the older group of young adults (25 to 34). If 20 percent is used as an average population figure, minority enrollments are disproportionately large in the three traditionally female areas cited earlier, as well as in the Trade and Industrial area. They are proportionately under-represented in the Agriculture and Technical areas.

The consistency of enrollment patterns remains not only across the two data bases but also in comparing all enrollments reported to VEDS with enrollments in occupationally specific programs. State numbers for all enrollments from VEDS show 25.7 percent minority (table 4.18), while State numbers for occupationally specific enrollments show 24.1 percent minority (table 4.19). These percentages compare with the national average from the OCR data cited earlier of 24.6 percent minority. Enrollments in specific programs permit closer inspection of the distribution of minorities (table 4.20).

Chart 4.4
Racial/Ethnic Distribution of Vocational Students in Institutions Offering Five or More Vocational Programs, by Program Area: 1979



SOURCE: Table 4.16

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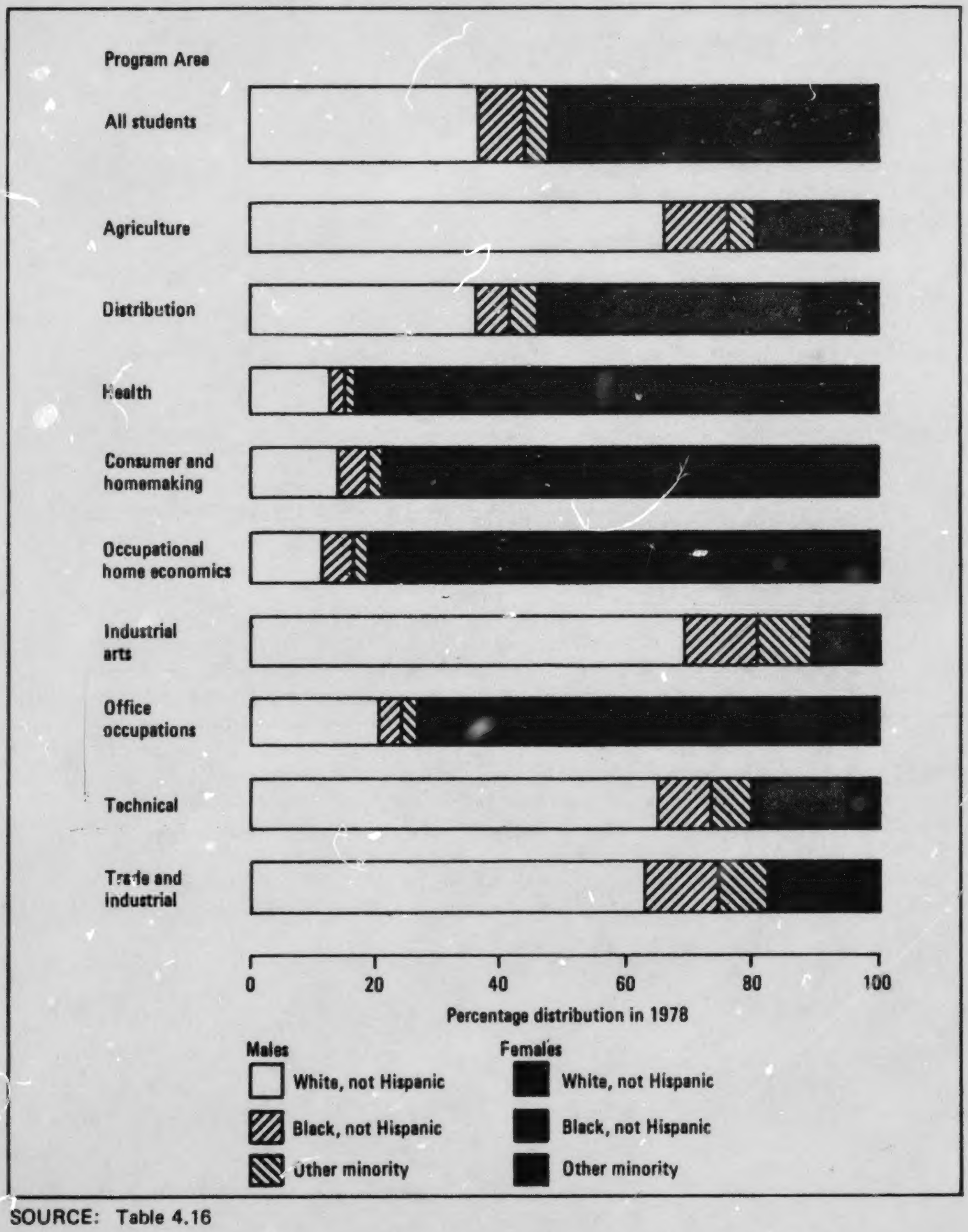
Chart 4.5
Distribution of Vocational Students in Institutions Offering Five or More Vocational Programs, by Sex and Race



SOURCE: Table 4.16

Enrollment of minorities varies not only by program areas but also by level and type of provider institution. Data from OCR provide distributions of students at four types of schools, two of them secondary and two postsecondary. Comprehensive high schools, at the secondary level, have by far the highest proportion of total enollments from minority groups, with 27.4 percent of all vocational students identified as minorities (table 4.21 and chart 4.6). Minority enrollments at this type of school do vary widely across program areas, being highest (35 percent) in Health and Technical, lowest (18 percent) in Agriculture. For eight of the nine areas, minority enrollments are more than 20 percent of the total. Area vocational centers, also secondary institutions, have a much smaller proportion of all enrollments from minority groups, 17 percent (table 4.22). For these schools, only Distribution, Consumer and Homemaking, Occupational Home Economics, and Office Occupations have at least 20 percent of enrollments comprised of minorities.

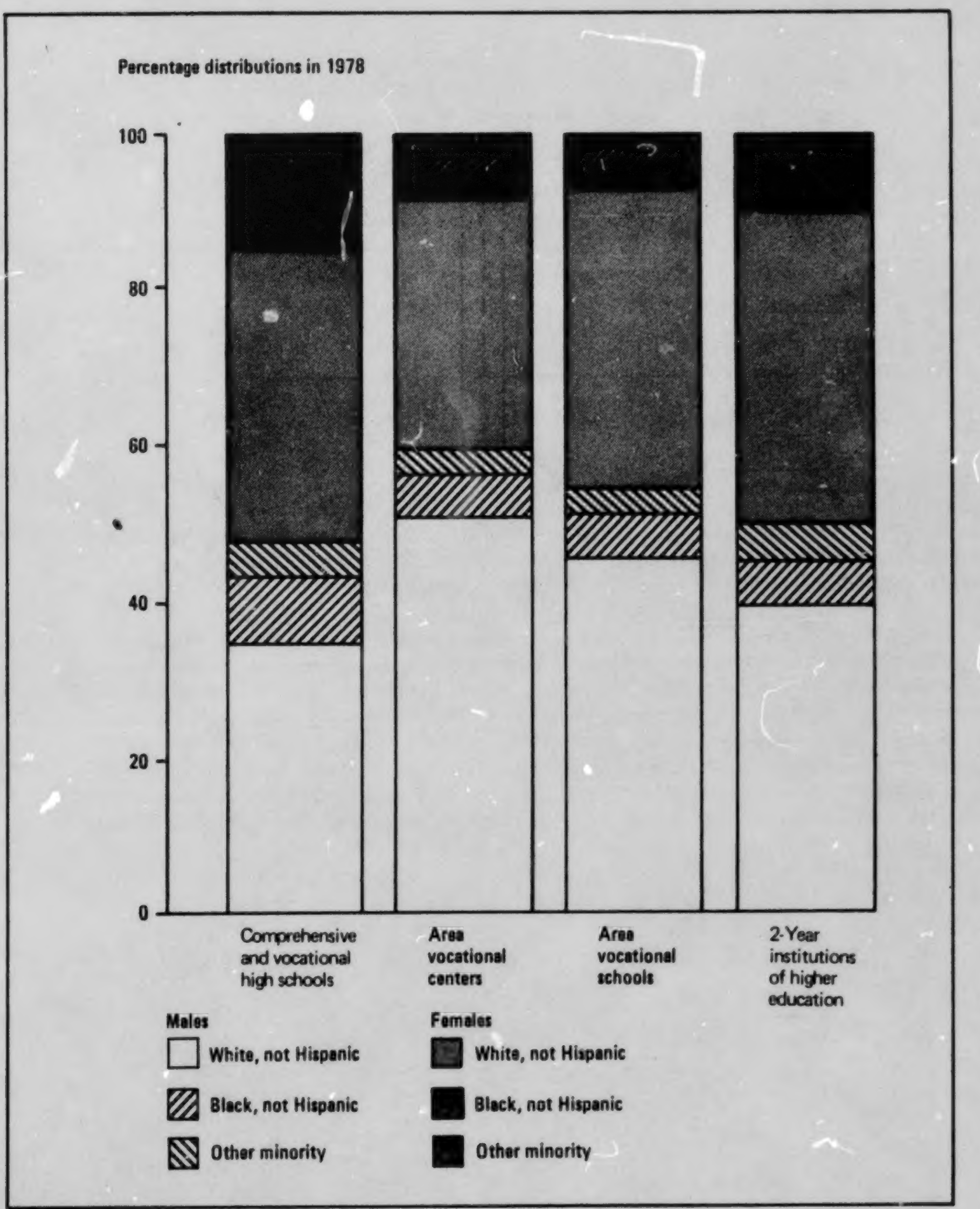
Postsecondary schools have smaller proportions of enrollments from minority groups than do comprehensive high schools. Area vocational schools enroll on average 16 percent minorities, 2-year institutions of higher education 20 percent (table 4.23 and 4.24). Occupational Home Economics has the largest minority enrollment in area vocational schools (22 percent), while Consumer and Homemaking enrollment for these schools is only four percent minority. Health has the largest minority enrollment in 2-year institutions of higher education (26 percent).

The availability of vocational education to special needs populations, especially handicapped and limited-English-proficient students, is particularly important in ensuring job opportunities for these individuals. A survey of the population has shown that an estimated 6.5 percent of all students between the ages of 14 and 25 are handicapped. Estimates of handicapped students enrolled in vocational education are available only from reports by teachers. Because handicaps as formally defined may not be observable in a classroom setting, it would be expected that a smaller proportion of students with observable handicaps would be reported as enrolled in vocational education than are enrolled in all educational programs. The highest reported incidence of handicapped students in a program area occurs in Occupational Home Economics, where handicapped students are identified as 4.0 percent of the total (table 4.25). There are only about one-third as many, 1.4 percent of program area enrollments, reported in the Office Occupations and Technical areas.

Estimates of limited-English-proficient students in vocational education suffer even more from problems of identification and reporting. Available data identify fewer than one percent of vocational students as having language barriers (table 4.26). This figure is so much lower than independent estimates of limited-English-proficiency students that its accuracy is suspect. When the available figures by program area are compared, Trade and Industrial shows the highest concentration of these special needs students, with Office Occupations, Occupational Home Economics, and Technical also as relatively high enrollment areas (table 4.26). The reported relative sizes do reinforce earlier observations showing that minority enrollments are concentrated in certain areas. Of particular interest is the variation in enrollments among school types within program areas.

Numbers of students who were handicapped or limited-English-speaking and who benefited from the provisions of the VEA for serving students with special needs are shown in table 4.27. Students in other special groups are also shown.

Chart 4.6
Distribution of Vocational Students in Institutions Offering Five or More Vocational Programs, by Type of School



SOURCE: Tables 4.21 to 4.24

Table 4.1
Type of community of high school seniors, by high school program: 1980

Type of community	High school program		
	Academic	General	Vocational
Total	100.0	100.0	100.0
Rural	25.3	35.4	31.8
Urban	19.6	18.4	22.7
Suburban	55.1	46.2	45.5

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond, special tabulations.

Table 4.2

Type of community of high school seniors, by high school program: 1972

Type of community	High school program Academic	General	Vocational
Total	100.0	100.0	100.0
In a rural or farming community	15.8	26.4	28.7
In a small city or town of fewer than 50,000 people that is not a suburb of a larger place	27.3	25.0	26.6
In a medium-sized city (50,000 - 100,000 people)	11.5	12.6	12.0
In a suburb of a medium-sized city	8.1	7.8	8.2
In a large city (100,000 - 500,000 people)	8.9	9.7	9.1
In a suburb of a large city	11.4	8.1	7.3
In a very large city (over 500,000 people)	6.3	5.1	4.8
In a suburb of a very large city	10.7	5.2	3.3

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Student Questionnaire and Test Results by Sex, High School Program, Ethnic Category, and Father's Education, 1975.

Table 4.3
Father's educational level of high school seniors, by high school program: 1972

Educational level	High school program Academic	 General	 Vocational
Total	100.0	100.0	100.0
Doesn't apply	1.4	4.2	5.0
Did not complete high (secondary) school	19.4	34.5	42.4
Finished high school or equivalent	28.9	30.7	33.9
Adult education program	1.1	1.7	1.2
Business or trade school	6.5	5.2	3.9
Some college	13.7	10.6	7.2
Finished college (four years)	15.1	7.9	3.9
Attended graduate or professional school (for example, law or medical school), but did not attain a graduate or professional degree	3.9	2.0	1.1
Obtained a graduate or professional degree (for example, M.A., Ph.D., or M.D.)	10.1	3.2	1.4

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Student Questionnaire and Test Results by Sex, High School Program, Ethnic Category, and Father's Education, 1975.

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Table 4.4
Father's educational level of high school seniors, by high school program: 1980

Educational level of father	High school program		
	Academic	General	Vocational
Total	100.0	100.0	100.0
Do not live with father	6.8	8.2	8.9
Less than high school	11.1	20.5	25.3
Finished high school only	21.9	26.4	27.5
Vocational - less than 2 yrs.	2.9	3.2	3.5
Vocational - at least 2 yrs.	5.0	4.8	5.7
College program - less than 2 yrs.	7.0	5.0	3.8
College - greater than 2 yrs.	5.9	4.9	3.5
Finished college	16.7	8.1	4.6
Master's degree	10.0	4.1	2.4
PhD.	7.2	2.4	1.0
Don't know	5.9	12.5	33.0

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond, special tabulations.

Table 4.5

Test battery formula scores of high school seniors, by high school program: 1972

	High school program		
	Academic	General	Vocational
WEIGHTED ESTIMATES OF MEANS			
Vocabulary	8.41	4.73	4.51
Picture-number	19.51	14.94	15.10
Reading	12.24	7.78	7.33
Letter groups	18.85	14.02	14.10
Mathematics	17.26	9.46	8.68
Mosaic comparisons	49.76	42.35	42.25
WEIGHTED ESTIMATES OF STANDARD DEVIATIONS			
Vocabulary	3.81	3.71	3.46
Picture-number	7.45	7.95	8.04
Reading	4.22	4.77	4.54
Letter groups	4.31	6.08	5.98
Mathematics	5.84	6.54	6.00
Mosaic comparisons	14.44	17.12	15.89
STANDARD ERRORS OF ESTIMATES OF MEANS			
Vocabulary	.053	.058	.061
Picture-number	.104	.125	.141
Reading	.059	.075	.079
Letter groups	.060	.096	.105
Mathematics	.081	.103	.105
Mosaic comparisons	.275	.355	.356

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Student Questionnaire and Test Results by Sex, High School Program, Ethnic Category, and Father's Education, 1975.

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Table 4.6
Test battery formula scores of high school seniors, by high school program: 1980

Standardized test scores	Academic	General	Vocational
WEIGHTED ESTIMATES OF MEANS			
Vocabulary	54.9	47.8	46.1
Reading	54.8	47.8	46.1
Mathematics	55.6	47.3	45.5
Visual	52.5	48.8	47.9
WEIGHTED ESTIMATES OF STANDARD DEVIATIONS			
Vocabulary	9.8	9.0	8.5
Reading	9.2	9.4	9.1
Mathematics	8.7	9.2	8.8
Visual	10.2	9.6	9.5
STANDARD ERRORS OF ESTIMATES OF MEANS			
Vocabulary	0.0	0.0	0.0
Reading	0.0	0.0	0.0
Mathematics	0.0	0.0	0.0
Visual	0.0	0.0	0.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond, special tabulations.

Table 4.7
Work experience of high school seniors, by high school program: 1980

Hours worked per week	Academic	General	Vocational
Total	100.0	100.0	100.0
None	4.6	4.5	4.7
1 to 4 hours	11.4	9.0	8.6
5 to 14 hours	21.5	18.4	16.0
15 to 21 hours	27.7	26.3	27.2
22 to 29 hours	15.8	17.9	18.0
30 to 34 hours	6.9	8.8	9.9
35+ hours	12.0	15.1	15.8

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond, special tabulations.

Table 4.8
Work experience of high school seniors, by high school program: 1972

Work characteristic	High school program		
	Academic	General	Vocational
HOURS WORKED PER WEEK			
	Percentage distributions		
Total	100.0	100.0	100.0
None	26.0	24.2	20.5
Less than 6 hours	13.6	11.8	8.8
6 to 10 hours	13.3	12.1	10.8
11 to 15 hours	11.0	8.4	9.5
16 to 20 hours	14.8	12.1	13.8
21 to 25 hours	9.6	10.1	11.9
26 to 30 hours	5.4	7.6	9.4
More than 30 hours	6.4	13.7	15.4
RELATION OF JOB TO STUDIES			
	Weighted percentage of working students who answered 'yes'		
My job is related to my studies	11.3	16.1	33.3
My job leads to work I'd like to do in the future	25.5	36.6	47.1
I work mostly on the weekends	62.2	57.8	49.9
I work mostly during the week	57.1	65.3	73.3

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Student Questionnaire and Test Results by Sex, High School Program, Ethnic Category, and Father's Education, 1975.

Table 4.9
Age distribution of students in noncollegiate postsecondary schools, by control and sex: 1979

Age	Public			Private		
	Total	Men	Women	Total	Men	Women
Total	100.00	100.00	100.00	100.00	100.00	100.00
Under 20	28.59	26.77	30.96	32.76	27.58	35.50
20-24	31.30	30.57	32.24	35.00	37.19	33.85
25-29	14.98	17.05	12.29	13.84	17.22	12.06
30-34	8.86	9.56	7.95	8.26	8.82	7.96
35-49	11.92	11.46	12.50	7.93	6.99	8.42
50 or older	3.34	3.79	2.75	1.46	1.39	1.50
Not reported	1.02	.79	1.31	.75	.82	.71

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations.

Table 4.10
Distribution of enrollments in noncollegiate postsecondary schools, by control and by attendance status: 1978

Attendance	Total	Public	Private
	Percentage distributions		
Total	100.00	100.00	100.00
Full time	69.3	64.2	71.5
Part time	30.7	35.8	28.5

SOURCE: United States Department of Education, National Center for Education Statistics, Enrollment and Programs in Noncollegiate Postsecondary Schools, 1978, 1979.

Table 4.11
Educational level and employment status of parents and students in noncollegiate postsecondary schools with occupational programs1/: 1979

Education level and employment status	Student	Mother	Father
	Percentage distribution		
Educational level:			
Total	100.0	100.0	100.0
Less than high school	8.2	32.6	35.6
Completed high school	64.0	38.4	28.8
Some college or other training	22.0	14.1	13.8
Completed 2 years of college (Associate degree)	2.7	3.0	2.4
Completed 4 years of college or more	3.0	5.5	10.3
Not reported	.2	6.3	9.0
Employment status:			
Total	100.0	100.0	100.0
Professional, technical, and managerial	7.4	7.4	18.2
Health	NA	8.4	1.5
Clerical and sales	14.9	22.2	8.1
Service	9.2	14.0	9.7
Agriculture	1.2	.5	5.9
Processing	1.8	5.5	6.2
Machine trades	5.0	.6	9.1
Bench work	1.0	2.0	1.5
Structural work	3.9	.4	14.4
Miscellaneous	3.4	1.4	10.2
Never worked	NA	27.3	.5
Not currently working	52.1 2/	NA	NA
Not reported	.1	10.2	14.7

NA: Not available.

1/ Only programs whose length was greater than 3 months were included in this survey. Correspondence schools and Opportunities Industrialization Center Schools were excluded from the survey.

2/ Of the 52.1 percent of students who were not currently working, 24.0 percent reported that they were looking for a job.

SOURCE: United States Department of Education, National Center for Education Statistics, The Condition of Education, 1980 Edition.

Table 4.12
Distribution of enrollments in noncollegiate postsecondary schools, by control and by sex: 1974, 1976, 1978

Control	Total	Men	Women
Total, 1974	100.0	51.0	49.0
Public	100.0	58.5	41.5
Private	100.0	47.1	52.9
Total, 1976	100.0	48.8	51.2
Public	100.0	54.7	45.3
Private	100.0	45.8	54.2
Total, 1978	100.0	48.0	52.0
Public	100.0	53.1	46.9
Private	100.0	45.8	54.2

SOURCE: United States Department of Education, National Center for Education Statistics, Enrollments and Programs in Noncollegiate Postsecondary Schools, 1978, 1979.

Table 4.1 3
Educational attainment of students in noncollegiate postsecondary schools with occupational programs, by area of program: 1978

Students' educational attainment	Area of current program							
	Total	Agriculture	Distribution	Health	Occupational home economics	Office occupations	Technical	Trade and industrial
	Percentage distributions							
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
8th grade or less	.80	.76	1.15	.40	9.20	.31	.52	1.29
Some high school	7.36	6.95	3.96	.71	14.99	5.04	4.93	12.54
Completed high school/reg. grad	55.01	53.78	56.47	52.73	54.91	57.80	56.94	53.50
Completed high school/G.E.D. test	8.94	6.85	9.01	6.64	10.51	9.89	7.34	9.60
Completed voc. school	5.36	6.55	6.06	5.37	1.55	5.30	4.99	5.47
Completed less than four years college	16.62	23.06	14.47	26.45	5.29	16.72	15.48	12.79
Completed two years college -- assoc degree	2.66	.96	2.49	3.83	.56	2.05	3.37	2.48
Completed 4 years or more college	3.01	.91	6.01	3.82	1.74	2.67	6.01	2.10
Not reported	.22	.20	.39	.06	1.24	.22	.43	.23

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations,

TABLE 4.14 -- ENROLLMENT (VEA), BY SEX AND BY INSTRUCTIONAL PROGRAM: 1978-79

PROGRAM	TOTAL ENROLLMENT	FEMALES	FEMALES AS A PERCENT OF TOTAL
AGRICULTURE	763,697	146,303	19.16
DISTRIBUTION	644,177	345,066	53.57
HEALTH OCCUPATIONS	436,249	367,758	84.30
PREP. FOR OCCUP. OF HOMEMAKING	2,838,420	2,254,063	79.41
OCCUPATIONAL HOME ECONOMICS	445,979	347,287	77.87
OFFICE OCCUPATIONS	2,887,981	2,121,342	73.45
TECHNICAL	374,426	72,684	19.41
TRADE & INDUSTRIAL OCCUPATIONS	2,253,715	393,864	17.48
INDUSTRIAL ARTS	1,665,311	248,851	14.94
OTHER NEC	918,596	422,351	45.98
TOTAL	13,228,549	6,719,569	50.80

NOTES: TABLE INCLUDES IMPUTED DATA.
TOTAL COLUMN EXCLUDES SHORT-TERM ADULTS.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

Table 4.15
Percent of total enrollments in vocational education programs (VEA), by program area and sex: Fiscal years 1972, 1977, and 1979

Program area	1972		1977		1979	
	Male	Female	Male	Female	Male	Female
Agriculture	94.7	5.3	85.1	14.9	80.8	19.2
Distribution	54.8	45.2	50.3	49.7	46.4	53.6
Health	15.4	84.6	21.8	78.2	15.7	84.3
Consumer and homemaking	7.9	92.1	18.4	81.6	20.6	79.4
Occupational home economics	14.0	86.0	18.4	81.6	22.2	77.8
Office occupations	23.7	76.3	24.9	75.1	26.5	73.5
Technical	90.3	9.7	83.0	17.0	82.5	17.5
Trade and industrial	88.4	11.6	85.6	14.4	85.1	14.9

SOURCE: United States Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Status of Vocational Education in 1978, 1979, and National Center for Education Statistics, Vocational Education Data System.

Table 4.16
Distribution of vocational students in institutions with five or more vocational programs, by sex and racial group by program area: Fall 1979

Program area	Total	Sex		Racial/ethnic group									
				American Ind./ Alaskan Native		Asian Am./ Pac. Isl.		Black, not Hispanic		Hispanic		White, not Hispanic	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Percentage distribution												
Total	100.0	48.9	51.1	0.6	0.5	0.8	0.9	7.1	8.7	2.9	3.1	37.6	37.8
Agriculture	100.0	80.6	19.4	1.5	0.3	0.5	0.2	9.7	1.8	2.0	0.7	66.9	16.4
Distribution	100.0	46.0	54.0	0.4	0.4	1.0	1.0	5.5	7.0	2.3	2.9	36.7	42.7
Health	100.0	16.1	83.9	0.2	0.8	0.3	1.1	2.1	11.1	1.0	3.5	12.5	67.4
Consumer and homemaking	100.0	21.5	78.5	0.3	0.9	0.4	1.0	5.3	16.8	1.2	4.3	14.3	55.5
Occupational home economics	100.0	18.3	81.7	0.3	1.0	0.2	0.7	4.8	17.8	1.3	5.1	11.8	57.0
Industrial arts	100.0	89.4	10.6	1.0	0.1	1.0	0.1	11.5	1.7	6.6	0.9	69.3	7.8
Office occupations	100.0	27.0	73.0	0.3	0.7	0.7	1.5	4.1	11.6	1.6	5.0	20.3	54.2
Technical	100.0	80.2	19.8	0.7	0.2	2.2	0.4	8.2	3.2	3.9	1.0	65.2	14.9
Trade and industrial	100.0	82.5	17.5	1.0	0.2	1.3	0.3	11.8	2.7	5.4	1.2	63.2	13.0

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 4.17
Distribution of vocational students in occupationally specific programs (VEA), by sex and racial/ethnic group, and by program area: 1978-79

Program area		American Indian/ Alaskan Native		Asian American/ Pacific Islander		Hispanic		Black, not Hispanic		White, not Hispanic	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	100.0	0.5	0.4	1.1	1.1	3.3	3.5	6.6	7.5	40.0	35.9
Agriculture	100.0	0.8	0.2	0.7	0.2	2.8	0.7	5.6	1.1	69.2	18.6
Distribution	100.0	0.3	0.4	1.1	1.0	2.7	3.2	5.5	6.8	36.7	42.4
Health	100.0	0.2	0.7	0.4	1.3	1.1	4.3	2.2	12.2	10.7	67.0
Home Economics	100.0	0.1	0.7	0.4	1.2	1.3	5.7	5.3	19.9	12.2	53.2
Office Occupations	100.0	0.2	0.6	0.9	1.9	1.8	6.2	4.1	12.0	18.3	54.0
Technical	100.0	0.8	0.2	2.3	0.6	4.9	1.1	8.2	2.8	65.3	13.9
Trade & Industrial	100.0	0.8	0.2	1.6	0.4	5.7	1.3	10.8	2.6	63.4	13.3

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Vocational Education Data System.

TABLE 4.18 -- ENROLLMENT (VEA), BY RACIAL/ETHNIC DESIGNATION AND SEX, AND BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	TOTAL	AMERICAN INDIAN/ ALASKAN NATIVE MALE	AMERICAN INDIAN/ ALASKAN NATIVE FEMALE	ASIAN AMERICAN/ PACIFIC ISLANDER MALE	ASIAN AMERICAN/ PACIFIC ISLANDER FEMALE	BLACK, NOT HISPANIC MALE	BLACK, NOT HISPANIC FEMALE	HISPANIC MALE	HISPANIC FEMALE	WHITE, NOT HISPANIC MALE	WHITE, NOT HISPANIC FEMALE
ALABAMA	296,193	71	82	121	81	35,657	36,108	276	153	70,308	63,336
ALASKA	37,904	5,668	3,091	202	272	520	705	204	230	12,834	11,370
ARIZONA	115,148	5,326	5,495	502	433	1,044	2,430	9,091	12,432	26,953	51,440
ARKANSAS	108,482	152	59	85	322	13,192	19,472	153	909	38,651	35,527
CALIFORNIA	1,676,586	10,251	9,621	43,095	39,916	78,219	92,314	128,248	139,872	576,415	558,557
COLORADO	115,262	590	682	636	687	2,395	3,619	6,219	8,383	41,824	50,227
CONNECTICUT	200,379	263	216	330	365	11,058	15,882	4,161	5,049	71,876	91,251
DELAWARE	54,049	143	179	136	152	5,218	7,223	252	302	21,565	19,685
DISTRICT OF COLUMBIA	22,436	0	0	8	0	11,870	10,402	6	14	62	82
FLORIDA	695,567	1,222	1,253	3,676	3,348	89,767	107,944	31,384	35,221	295,974	285,776
GEORGIA	301,699	743	522	544	510	57,175	67,400	494	423	124,404	129,484
HAWAII	49,601	40	66	16,586	21,062	176	265	782	837	4,241	5,546
IDAHO	33,500	198	202	120	127	56	39	382	533	14,223	17,626
ILLINOIS	731,817	557	542	2,459	2,421	54,579	60,748	11,353	10,514	297,978	290,666
INDIANA	153,874	148	114	238	173	6,590	6,751	1,125	1,098	67,969	69,668
IOWA	123,322	54	101	150	222	817	1,420	209	301	53,371	66,677
KANSAS	87,202	472	622	2,702	3,952	460	417	872	1,092	33,566	43,049
KENTUCKY	206,991	43	50	116	116	8,563	11,679	62	38	96,759	95,565
LOUISIANA	218,975	222	329	302	410	33,980	46,297	737	503	60,423	65,572
MAINE	82,162	77	46	16	6	19	10	12	17	9,925	12,034
MARYLAND	229,766	782	1,095	1,443	2,529	22,728	40,974	802	1,171	98,963	99,279
MASSACHUSETTS	201,243	76	120	692	759	5,184	3,959	2,480	2,449	138,395	127,129
MICHIGAN	310,560	1,271	1,240	542	604	13,646	19,887	1,719	2,491	117,817	151,323
MINNESOTA	204,534	1,165	654	589	491	1,577	2,151	747	861	92,922	103,417
MISSISSIPPI	121,620	35	49	98	165	29,045	27,147	62	124	36,163	28,792
MISSOURI	203,490	456	509	228	209	11,331	20,748	373	490	73,201	95,791
NEBRASKA	71,972	340	327	84	222	1,625	1,093	483	637	31,585	34,768
NEVADA	31,222	372	339	231	186	1,286	1,755	715	577	14,676	11,585
NEW HAMPSHIRE	48,112	36	65	32	35	98	48	31	22	27,012	20,739
NEW JERSEY	679,858	312	277	3,978	3,536	62,596	52,465	25,463	19,975	281,588	229,728
NEW MEXICO	53,437	1,855	1,703	91	81	539	786	11,406	12,509	12,428	12,039
NEW YORK	1,224,819	2,748	2,167	4,534	5,777	106,938	143,385	29,332	43,648	482,423	403,867
NORTH CAROLINA	379,177	2,710	2,556	305	211	57,144	60,316	590	415	148,309	106,618
NORTH DAKOTA	35,768	632	544	9	31	18	28	44	36	17,974	16,450
OHIO	612,514	392	480	713	698	57,786	63,972	4,218	4,135	222,025	258,135
OKLAHOMA	139,350	4,708	5,643	696	609	4,770	5,863	770	704	60,649	54,930
OREGON	187,133	584	474	741	549	966	728	857	648	93,943	88,054
PENNSYLVANIA	323,592	307	318	437	455	17,557	23,018	1,559	1,488	123,886	154,583
RHODE ISLAND	35,989	9	16	21	32	726	1,098	47	77	14,367	19,596
SOUTH CAROLINA	214,161	1,812	375	269	249	46,729	54,578	242	146	56,408	55,361
SOUTH DAKOTA	85,750	409	398	16	34	16	40	27	72	10,254	14,484
TENNESSEE	222,414	405	330	264	162	26,171	27,477	213	118	93,554	73,640
TEXAS	777,451	1,379	1,969	2,813	2,606	61,525	76,753	75,362	81,812	235,561	237,671
UTAH	53,583	637	595	660	457	154	127	1,075	904	43,134	35,880
VERMONT	17,667	0	23	4	6	14	13	4	6	7,154	10,443
VIRGINIA	330,494	201	310	1,119	1,105	36,063	45,802	771	882	126,426	118,035
WASHINGTON	278,452	2,015	2,700	1,644	2,043	1,858	2,086	3,392	4,460	97,034	121,000
WEST VIRGINIA	41,167	341	287	88	112	2,226	2,368	29	34	35,165	40,417
WISCONSIN	469,523	672	1,013	341	328	3,974	5,018	1,907	1,309	239,615	214,346
WYOMING	19,022	2	0	1	2	28	42	237	444	9,607	8,619
TOTAL U.S.	13,046,269	53,197	52,728	95,003	[illegible]	983,623	1,175,782	360,919	400,400	4,915,849	4,909,870
AMERICAN SAMOA	2,175	0	0	1,021	1,151	0	0	0	0	0	3
NORTHERN MARIANAS	1,671	0	0	873	796	0	0	0	0	0	2
GUAM	5,461	0	0	2,085	1,975	13	11	0	0	335	242
PUERTO RICO	168,313	0	0	0	0	0	0	92,546	75,767	0	6
TRUST TERRITORY	4,666	0	0	2,716	1,943	0	0	0	0	0	1
OUTLYING AREAS	182,280	0	0	7,495	5,865	13	11	92,546	75,767	335	248
U.S. & OUTLYING AREAS	13,228,549	53,197	52,728	102,498	104,763	983,636	1,175,793	453,465	476,167	4,916,184	4,910,118

NOTES: TABLE INCLUDES IMPUTED DATA.
TOTAL COLUMN EXCLUDES SHORT-TERM ADULTS.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 4.19 -- ENROLLMENT IN OCCUPATIONALLY SPECIFIC PROGRAMS (VEA), BY RACIAL/ETHNIC DESIGNATION AND SEX, AND BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	TOTAL	AMERICAN INDIAN/ ALASKAN NATIVE MALE	AMERICAN INDIAN/ ALASKAN NATIVE FEMALE	ASIAN AMERICAN/ PACIFIC ISLANDER MALE	ASIAN AMERICAN/ PACIFIC ISLANDER FEMALE	BLACK, NOT HISPANIC MALE	BLACK, NOT HISPANIC FEMALE	HISPANIC MALE	HISPANIC FEMALE	WHITE, NOT HISPANIC MALE	WHITE, NOT HISPANIC FEMALE
ALABAMA	101,818	46	19	94	41	19,446	13,932	256	126	40,525	27,333
ALASKA	21,611	1,041	1,027	180	223	339	449	149	172	8,097	7,534
ARIZONA	24,146	2,631	1,387	205	119	201	420	1,806	2,642	6,356	8,291
ARKANSAS	35,870	70	23	39	19	4,269	3,090	79	48	17,242	10,983
CALIFORNIA	1,076,944	7,147	6,548	31,094	20,157	56,800	61,050	78,274	80,553	369,293	350,028
COLORADO	[illegible]	466	307	561	470	1,915	2,400	4,586	4,623	33,470	32,739
CONNECTICUT	[illegible]	39	37	76	105	3,088	4,053	856	1,045	20,461	22,527
DELAWARE	17,480	[illegible]	21	17	17	1,422	2,205	41	61	7,677	6,417
DISTRICT OF COLUMBIA	12,942	0	8	0	0	4,534	8,395	0	3	7	3
FLORIDA	226,572	[illegible]	366	1,091	903	20,090	22,949	7,876	9,081	99,210	86,791
GEORGIA	113,731	292	99	165	126	16,319	16,969	187	134	40,875	38,655
HAWAII	31,991	26	22	12,189	12,690	121	90	624	457	2,920	2,846
IDAHO	14,026	91	112	60	52	23	15	147	149	6,732	6,637
ILLINOIS	352,263	349	364	1,304	1,438	25,775	33,509	5,480	5,841	140,709	137,356
INDIANA	67,247	100	56	166	70	3,056	2,199	742	253	44,295	16,302
IOWA	58,06[illegible]	36	35	105	54	297	230	149	103	32,285	24,759
KANSAS	43,965	302	292	1,680	1,546	376	256	583	428	20,512	17,990
KENTUCKY	63,793	5	4	37	29	2,681	2,862	34	13	31,041	27,087
LOUISIANA	77,766	73	69	261	196	13,711	14,711	308	227	24,657	23,553
MAINE	12,201	69	20	15	4	10	3	12	7	8,201	3,932
MARYLAND	100,113	270	208	533	562	10,190	15,408	366	375	32,446	39,685
MASSACHUSETTS	69,816	65	33	109	73	1,698	1,090	765	443	42,785	22,755
MICHIGAN	186,395	840	902	335	311	7,770	9,324	1,115	1,464	85,483	79,163
MINNESOTA	141,137	1,109	520	521	202	1,203	998	604	486	70,363	57,843
MISSISSIPPI	41,734	14	17	31	33	10,098	6,029	23	16	16,313	9,160
MISSOURI	107,064	379	363	190	180	5,633	7,326	300	300	56,815	35,570
NEBRASKA	37,138	174	96	64	47	1,032	786	209	203	19,539	14,988
NEVADA	11,108	122	101	60	63	516	460	207	219	5,482	3,912
NEW HAMPSHIRE	11,133	16	26	9	10	25	14	9	3	5,907	5,034
NEW JERSEY	91,591	102	76	433	369	5,916	5,643	1,951	1,561	42,434	33,196
NEW MEXICO	23,727	819	662	48	37	224	227	5,117	5,023	6,407	5,167
NEW YORK	561,636	829	1,208	3,800	4,111	34,302	64,683	15,927	30,116	170,567	220,087
NORTH CAROLINA	166,718	1,212	1,803	202	139	22,176	19,655	585	385	76,261	51,060
NORTH DAKOTA	19,038	430	293	7	13	15	15	20	15	10,92[illegible]	7,276
OHIO	181,588	155	155	119	93	13,804	14,721	959	686	79,151	71,665
OKLAHOMA	67,573	2,181	1,999	395	260	2,964	3,151	420	295	32,435	23,465
OREGON	78,571	404	415	563	475	567	549	560	520	39,743	34,707
PENNSYLVANIA	195,543	197	170	330	665	9,791	12,306	792	701	82,169	88,734
RHODE ISLAND	18,007	9	13	21	22	320	551	42	20	5,101	11,980
SOUTH CAROLINA	105,020	402	324	234	132	22,617	18,308	195	92	35,759	26,997
SOUTH DAKOTA	9,723	200	149	14	3	11	4	13	11	6,109	3,001
TENNESSEE	98,965	189	129	167	105	11,059	11,805	167	75	43,150	32,059
TEXAS	339,310	629	551	1,999	1,637	22,702	25,676	32,532	29,466	123,487	100,631
UTAH	44,220	376	250	524	297	116	76	643	405	24,703	16,830
VERMONT	9,038	0	0	4	0	5	2	0	2	4,796	4,221
VIRGINIA	154,257	96	169	489	441	17,489	18,133	403	272	63,321	53,424
WASHINGTON	151,349	1,540	1,506	1,273	1,168	1,533	1,316	2,559	2,532	71,008	66,026
WEST VIRGINIA	50,152	214	195	72	95	1,539	1,537	19	23	23,016	23,402
WISCONSIN	62,629	108	147	124	54	936	1,146	227	154	36,390	23,343
WYOMING	3,491	2	0	1	2	1	7	13	17	1,714	1,734
TOTAL U.S.	5,646,849	27,045	23,136	61,290	57,45[illegible]	300,857	431,357	169,007	181,822	2,279,253	2,035,624
AMERICAN SAMOA	1,170	0	0	521	646	0	0	0	0	0	3
NORTHERN MARIANAS	178	0	0	103	73	0	0	0	0	0	2
GUAM	1,302	0	0	818	414	0	1	0	0	92	57
PUERTO RICO	31,239	0	0	0	0	0	0	16,763	14,476	0	0
TRUST TERRITORY	1,479	0	0	1,167	312	0	0	0	0	0	0
OUTLYING AREAS	35,448	0	0	2,609	1,445	0	1	16,763	14,476	92	62
U.S. & OUTLYING AREAS	5,682,297	27,045	23,136	63,899	58,903	300,857	431,358	185,770	196,298	2,279,345	2,035,686

NOTES: TABLE INCLUDES IMPUTED DATA.
TOTAL COLUMN EXCLUDES SHORT-TERM ADULTS.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 4.20 -- ENROLLMENT IN OCCUPATIONALLY SPECIFIC PROGRAMS (VEA), BY RACIAL/ETHNIC DESIGNATION AND SEX, AND BY PROGRAM; 1978-79

PROGRAM	TOTAL	AMERICAN INDIAN/ ALASKAN NATIVE		ASIAN AMERICAN/ PACIFIC ISLANDER		BLACK, NOT HISPANIC		HISPANIC		WHITE, NOT HISPANIC	
		MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
AGRICULTURAL PRODUCTION	170,687	1,327	318	1,193	319	7,000	1,369	5,429	967	126,746	25,839
AGRICULTURAL SUPPLIES/SERVICES	19,604	117	37	82	41	656	87	568	117	13,921	3,978
AGRICULTURAL MECHANICS	70,671	635	136	224	90	6,556	497	1,615	299	54,578	6,039
AGRICULTURAL PRODUCTS	5,317	37	7	48	11	437	95	129	39	3,492	1,022
HORTICULTURE	74,438	560	246	889	403	4,398	1,925	2,061	959	37,023	25,994
RENEWABLE NATURAL RESOURCES	15,997	187	95	77	41	566	146	391	136	10,944	3,414
FORESTRY	12,501	147	51	62	25	855	126	231	43	8,976	1,951
OTHER AGRICULTURE	20,224	201	75	104	31	702	187	481	126	13,891	4,426
ADVERTISING SERVICES	9,344	26	26	76	73	667	572	188	189	3,573	3,954
APPAREL & ACCESSORIES	25,604	25	76	78	167	1,086	3,153	277	731	4,337	15,762
AUTOMOTIVE	6,591	13	15	17	6	537	253	135	36	4,277	1,302
FINANCE & CREDIT	25,398	79	143	207	269	866	1,151	502	857	6,988	14,536
FLORISTRY	2,895	8	11	26	20	123	164	67	84	843	1,571
FOOD DISTRIBUTION	25,322	67	148	133	131	1,714	1,501	745	633	11,275	8,975
FOOD SERVICES	29,257	58	76	314	162	2,023	2,897	348	482	8,953	13,944
GENERAL MERCHANDISE	195,507	539	646	2,240	2,098	11,244	14,023	4,944	6,518	69,162	83,293
HARDWARE, BUILDING MATERIALS, ETC.	3,434	5	4	6	3	189	128	83	35	2,173	812
HOME FURNISHINGS	2,304	4	5	6	11	105	115	19	37	833	1,169
HOTEL & LODGING	11,752	34	29	277	298	886	667	321	247	5,277	3,716
INDUSTRIAL MARKETING	17,602	41	36	135	110	1,329	1,186	1,039	650	7,725	5,351
INSURANCE	6,472	24	25	108	85	471	565	195	237	2,370	2,392
PERSONAL SERVICES	5,435	9	26	10	15	325	534	90	111	1,698	2,617
REAL ESTATE	99,173	477	467	1,027	1,461	3,967	3,815	3,975	4,208	39,602	39,774
RECREATION & TOURISM	14,154	85	78	243	211	788	714	485	572	5,126	5,862
TRANSPORTATION	10,606	44	35	136	109	788	510	209	334	5,163	3,186
OTHER RETAIL TRADES	15,273	36	36	57	44	863	1,155	191	227	5,351	7,313
OTHER DISTRIBUTIVE EDUCATION	47,784	97	137	277	294	2,705	3,495	1,357	1,772	18,545	19,105
DENTAL ASSISTING	16,025	25	97	47	238	219	1,621	137	808	1,159	11,682
DENTAL HYGIENE(ASSOCIATE DEGREE)	6,496	3	27	7	60	29	425	22	237	212	5,474
DENTAL LABORATORY TECHNOLOGY	3,252	8	9	20	32	234	201	110	88	964	1,514
MEDICAL LABORATORY ASSISTING	13,143	24	64	50	139	649	2,079	242	544	1,702	7,680
OTHER MEDICAL LABORATORY TECHNOLOGY	4,026	18	31	26	48	93	312	84	206	765	2,461
NURSING(ASSOCIATE DEGREE)	90,733	102	560	256	1,329	1,082	9,867	666	3,765	7,337	65,781
PRACTICAL(VOCATIONAL)NURSING	71,366	75	480	118	711	799	9,085	411	2,809	[illegible]	52,775
NURSING ASSISTANCE(AIDE)	44,319	85	521	151	752	591	6,155	460	2,415	3,189	29,992
OTHER NURSING	12,101	19	76	51	183	263	1,609	273	728	1,241	7,788
REHABILITATION	5,775	7	27	15	58	176	641	63	237	570	3,979
RADIOLOGIC TECHNOLOGY(X-RAY)	10,769	33	59	133	125	491	917	301	516	2,340	5,869
MENTAL HEALTH TECHNOLOGY	10,526	49	112	34	120	515	1,638	146	425	1,467	6,020
INHALATION THERAPY	10,121	20	51	56	156	443	985	226	398	2,228	5,558
MEDICAL ASSISTANT	18,214	29	175	51	247	367	2,723	145	822	1,440	12,215
COMMUNITY HEALTH AIDE	7,716	3	22	6	42	128	958	44	437	458	5,618
MEDICAL EMERGENCY TECHNICIAN	14,078	103	195	85	247	546	798	388	613	5,795	6,108
OTHER HEALTH OCCUPATIONS EDUCATION	47,795	74	268	245	449	1,768	7,028	775	1,833	6,339	29,016
CARE & GUIDANCE OF CHILDREN	101,553	124	855	307	1,336	2,092	18,981	1,063	7,283	6,721	62,791
CLOTHING MGT., PROD., & SERVICES	31,463	32	139	70	379	2,943	10,064	213	1,418	1,550	14,655
FOOD MGT., PRODUCTION, & SERVICES	80,608	144	380	624	892	6,364	14,998	1,195	2,825	17,569	35,613
HOME FURN.,EQUIPMENT, & SERVICES	9,268	20	94	40	167	257	969	151	902	908	5,788
INSTITUTIONAL & HOME MGT. & SUP.	5,799	4	34	23	48	243	906	48	240	716	3,537
OTHER OCCUP. PREP. FOR HOMEMAKING	16,073	38	140	26	101	1,045	2,756	428	1,252	2,367	7,918
ACCOUNTING & COMPUTING OCCUPATIONS	402,084	1,028	2,108	4,768	6,475	21,351	40,671	9,962	23,858	96,786	192,997
COMPUTE & CONSOLE OPERATORS	25,703	64	165	363	537	1,502	3,252	542	1,358	6,452	11,478
PROGRAMMERS	62,359	178	273	985	996	4,703	6,423	2,304	2,989	20,129	23,301
OTHER BUSINESS DATA PROCESSING	79,111	172	397	1,096	1,723	6,840	9,132	2,010	4,206	20,996	34,451
FILING, OFF. MACHINES, & GEN. OFF.	419,972	817	3,221	2,997	8,248	15,013	61,503	6,369	28,960	57,203	235,561
INFORMATION, COMMUNICATION OCCUP.	21,997	61	173	332	571	950	2,083	701	1,683	4,814	10,629
MATERIALS SUPPORT OCCUPATIONS	2,846	4	6	16	17	141	147	31	77	1,197	1,210
PERSONNEL, TRAINING, & RELATED	18,639	108	183	277	492	895	1,672	510	1,313	4,800	8,397
STENOGRAPHIC, SECRETARIAL,& RELATED	420,656	446	2,474	2,148	8,166	6,203	54,639	3,958	28,876	33,923	280,623
SUPERVISORY & ADMINISTRATIVE MGT.	155,540	463	648	1,299	1,678	12,103	12,609	3,866	5,554	58,930	58,450
TYPING & RELATED OCCUPATIONS	197,368	577	1,953	1,663	4,878	6,939	25,916	3,154	12,282	30,886	110,740
OTHER OFFICE OCCUPATIONS	52,950	87	188	252	503	1,346	5,496	729	5,060	6,803	32,486
ARCHITECTURAL TECHNOLOGY	25,180	159	45	878	221	2,097	618	1,761	503	15,169	3,649
AUTOMOTIVE TECHNOLOGY	8,908	143	8	145	20	728	68	257	43	6,911	593
CIVIL TECHNOLOGY	19,951	118	24	358	45	1,233	215	814	106	11,189	1,849
ELECTRICAL TECHNOLOGY	15,335	96	10	233	65	1,351	123	729	68	11,973	695
ELECTRONIC TECHNOLOGY	78,795	593	116	2,282	748	6,685	1,241	4,534	812	55,715	6,357
ENVIRONMENTAL-CONTROL TECHNOLOGY	6,036	141	8	69	9	361	48	288	53	4,651	408
INDUSTRIAL TECHNOLOGY	11,649	66	17	138	32	1,082	307	291	111	8,074	1,531
MECHANICAL TECHNOLOGY	23,590	175	27	341	95	1,999	331	635	129	17,526	2,122

TABLE 4.20 -- ENROLLMENT IN OCCUPATIONALLY SPECIFIC PROGRAMS (VEA), BY RACIAL/ETHNIC DESIGNATION AND SEX, AND BY PROGRAM;

1978-79--CONTINUED

PROGRAM	TOTAL	AMERICAN INDIAN/ ALASKAN NATIVE MALE	AMERICAN INDIAN/ ALASKAN NATIVE FEMALE	ASIAN AMERICAN/ PACIFIC ISLANDER MALE	ASIAN AMERICAN/ PACIFIC ISLANDER FEMALE	BLACK, NOT HISPANIC MALE	BLACK, NOT HISPANIC FEMALE	HISPANIC MALE	HISPANIC FEMALE	WHITE, NOT HISPANIC MALE	WHITE, NOT HISPANIC FEMALE
SCIENTIFIC DATA PROCESSING	14,967	81	33	416	129	1,133	725	775	823	7,710	3,742
COMMERCIAL PILOT TRAINING	8,320	65	19	268	77	447	196	493	132	5,336	1,295
FIRE & FIRE SAFETY TECHNOLOGY	11,885	97	21	177	38	752	148	378	78	8,617	779
POLICE SCIENCE TECHNOLOGY	57,094	500	183	1,539	369	5,462	2,412	2,892	807	34,282	9,440
OTHER TECHNICAL EDUCATION	63,627	274	97	872	275	4,659	3,297	2,473	1,024	35,410	15,246
WATER & WASTE WATER TECHNOLOGY	2,738	102	13	65	17	165	62	150	31	1,729	404
AIR CONDITIONING	48,917	256	24	516	50	6,460	436	3,147	163	36,080	1,785
APPLIANCE REPAIR	12,736	98	14	127	25	2,427	257	852	89	7,983	864
BODY & FENDER REPAIR	65,761	527	60	806	126	8,826	610	4,773	408	46,280	3,345
AUTO MECHANICS	232,059	2,391	308	5,330	547	26,898	2,540	14,463	1,779	162,913	14,890
AUTOMOTIVE SPECIALIZATION	24,626	107	39	409	116	2,393	427	1,998	352	16,285	2,420
AVIATION OCCUPATIONS	22,360	198	45	383	119	1,809	347	1,769	358	14,966	2,342
COMMERCIAL ART OCCUPATIONS	44,253	387	154	512	280	3,150	2,269	2,902	1,202	16,934	17,393
COMMERCIAL PHOTOGRAPHY OCCUP.	22,031	179	52	468	152	1,457	709	1,702	576	11,149	5,507
CARPENTRY	114,062	1,309	127	1,699	214	11,637	1,248	5,067	631	85,034	7,096
ELECTRICITY	36,815	274	27	503	46	4,436	481	1,990	165	26,897	1,996
MASONRY	29,201	217	13	205	20	8,699	479	779	63	17,547	1,179
PLUMBING & PIPEFITTING	22,843	176	15	300	15	2,486	132	1,833	45	16,955	886
OTHER CONSTRUCTION & MAINTENANCE	84,352	641	87	1,376	198	10,892	1,073	5,902	501	58,505	5,097
CUSTODIAL SERVICES	9,495	105	23	117	16	1,613	273	343	61	5,993	951
DIESEL MECHANIC	22,255	268	19	213	26	2,055	177	1,104	75	17,318	1,000
DRAFTING OCCUPATIONS	96,773	609	156	1,590	328	10,095	2,052	4,646	868	62,734	13,615
ELECTRICAL OCCUPATIONS	39,036	216	26	329	33	4,533	303	1,882	164	30,002	1,548
ELECTRONICS OCCUPATIONS	83,775	506	103	1,240	255	9,512	1,190	5,739	800	57,655	6,695
FOREMANSHIP, SUPER., & MGT. DEVEL.	18,740	136	41	451	138	1,340	508	1,506	373	10,449	3,798
GRAPHIC ARTS OCCUPATIONS	69,162	529	196	1,147	420	7,815	2,536	3,323	1,159	37,096	15,337
INSTRUMENT MAINTENANCE & REPAIR	2,510	4	1	15	7	415	85	85	56	1,510	332
MARITIME OCCUPATIONS	4,522	37	9	75	19	333	67	268	60	3,074	580
MACHINE SHOP	72,882	448	68	1,065	151	6,698	848	3,301	479	55,077	4,671
MACHINE TOOL OCCUPATION	6,891	56	11	87	15	1,029	196	223	106	4,826	548
SHEET METAL	16,906	141	26	333	78	1,695	211	976	191	11,830	1,425
WELDING & CUTTING	109,299	1,144	135	1,470	217	13,693	1,521	6,272	658	78,489	5,700
TOOL & DIE MAKING	4,718	17	1	32	2	306	61	196	7	3,812	284
OTHER METALWORKING OCCUPATIONS	27,881	228	40	493	73	2,372	297	1,243	208	20,361	2,290
METALLURGY OCCUPATIONS	1,209	4	2	9	2	42	12	35	9	911	183
COSMETOLOGY	82,684	342	353	647	586	2,759	9,574	2,321	7,401	13,726	48,975
OTHER PERSONAL SERVICES	5,416	20	12	40	22	371	550	175	159	1,774	2,285
PLASTICS OCCUPATIONS	2,904	24	5	73	20	296	70	250	59	1,696	411
FIREMAN TRAINING	12,717	115	24	487	76	1,022	217	1,276	245	7,846	1,409
LAW ENFORCEMENT TRAINING	52,862	337	94	1,066	275	3,739	1,660	4,685	1,437	30,449	9,524
OTHER PUBLIC SERVICE OCCUPATIONS	19,944	178	88	450	420	1,524	1,843	1,085	540	6,857	7,007
QUANTITY FOOD OCCUPATIONS	34,874	229	93	662	274	3,525	2,661	[illegible]	783	15,342	9,814
REFRIGERATION	2,745	25	3	220	5	353	32	[illegible]	10	1,820	154
SMALL ENGINE REPAIR	22,995	107	26	255	40	3,730	216	[illegible]	123	16,284	1,108
STATIONARY ENERGY SOU[illegible]OCCUP.	1,493	14	3	25	6	82	27	[illegible]	19	1,046	109
TEXTILE PRODUCTION & FABRICATION	21,419	96	48	168	225	2,023	2,839	[illegible]	2,132	6,369	6,115
UPHOLSTERING	7,145	103	34	92	45	1,435	566	[illegible]	145	2,805	1,106
WOODWORKING OCCUPATIONS	32,447	305	67	995	153	3,938	612	[illegible]	484	20,347	3,088
OTHER TRADE&INDUSTRIAL OCCUPATIONS	90,931	627	148	963	321	7,913	3,531	[illegible]	1,429	55,365	16,540
OTHER PROGS,GRTR THAN 1% OF TOTAL	128,324	509	482	1,312	698	11,753	10,900	2,224	1,011	56,943	41,692
OTHER PROGS,LESS THAN 1% OF TOTAL	31,619	64	48	95	66	3,647	3,777	1,174	908	11,908	9,772
TOTAL	5,682,297	27,045	23,136	63,899	58,903	380,857	431,350	185,770	196,298	2,279,345	2,035,686

NOTES: TABLE INCLUDES IMPUTED DATA.
TOTAL COLUMN EXCLUDES SHORT-TERM ADULTS.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

Table 4. 21
Distribution of vocational students in comprehensive and vocational high schools, by sex and racial group by program area:
Fall 1979

Program area	Total	Sex		Racial/ethnic group									
				American Ind./ Alaskan Native		Asian Am./ Pac. Isl.		Black, not Hispanic		Hispanic		White, not Hispanic	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Percentage distribution												
Total	100.0	47.3	52.7	0.6	0.6	0.6	0.8	8.2	10.4	2.9	3.4	34.9	37.7
Agriculture	100.0	83.2	16.8	1.6	0.3	0.4	0.2	11.2	2.0	1.9	0.7	68.0	13.6
Distribution	100.0	44.6	55.4	0.3	0.4	0.4	0.6	7.8	10.5	1.8	2.6	34.3	41.3
Health	100.0	17.1	82.9	0.3	1.2	0.2	0.6	4.2	21.8	1.3	4.8	11.1	54.5
Consumer and homemaking	100.0	21.1	78.9	0.3	0.9	0.4	1.0	5.6	17.8	1.3	4.3	13.5	54.9
Occupational home economics	100.0	19.0	81.0	0.3	1.1	0.2	0.6	5.4	19.0	1.4	5.1	11.6	55.1
Industrial arts	100.0	89.5	10.5	1.0	0.1	1.0	0.1	11.6	1.7	6.7	0.9	69.2	7.7
Office occupations	100.0	24.1	75.9	0.3	0.7	0.5	1.4	4.2	12.6	1.5	5.5	17.6	55.7
Technical	100.0	79.5	20.5	0.6	0.1	3.7	0.6	14.9	4.8	7.2	2.3	53.1	12.8
Trade and industrial	100.0	85.4	14.6	1.1	0.2	0.9	0.1	15.5	3.3	6.2	1.1	61.8	9.8

NOTE: Figures are based on enrollments at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 4. 22
Distribution of vocational students in area vocational centers (secondary), by sex and racial group by program area: Fall 1979

Program area	Total	Sex		Racial/ethnic group									
				American Ind./ Alaskan Native		Asian Am./ Pac. Isl.		Black, not Hispanic		Hispanic		White, not Hispanic	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Percentage distribution												
Total	100.0	59.7	40.3	0.5	0.4	0.4	0.4	5.3	5.0	2.1	2.2	51.4	32.3
Agriculture	100.0	71.5	28.5	0.7	0.2	0.3	0.1	5.3	1.3	1.8	1.1	63.4	25.7
Distribution	100.0	29.5	70.5	0.5	1.0	0.4	0.6	2.9	6.5	2.4	7.9	23.3	54.6
Health	100.0	7.6	92.4	0.2	0.9	0.1	0.7	1.3	10.5	0.6	3.8	5.4	76.5
Consumer and homemaking	100.0	16.7	83.3	0.1	0.2	0.2	0.7	3.1	19.0	0.3	0.7	13.0	62.5
Occupational home economics	100.0	18.1	81.9	0.1	0.6	0.1	0.2	3.3	14.9	0.7	2.9	13.9	63.2
Industrial arts	100.0	89.1	10.9	0.1	(*)	0.7	(*)	8.1	1.6	2.4	0.1	77.8	9.2
Office occupations	100.0	16.3	83.7	0.1	0.8	0.2	1.6	1.8	10.5	1.0	5.4	13.1	65.4
Technical	100.0	73.7	26.3	0.3	0.1	0.2	0.1	6.4	2.2	1.5	0.5	65.3	23.4
Trade and industrial	100.0	82.3	17.7	0.7	0.1	0.4	0.1	7.0	1.6	2.7	1.1	71.4	14.7

(*)Less than 0.05%.

NOTE: Figures are based on enrollments at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 4. 23
Distribution of vocational students in area vocational schools (postsecondary), by sex and racial group by program area: Fall 1979

Program area	Total	Sex		Racial/ethnic group									
				American Ind./ Alaskan Native		Asian Am./ Pac. Isl.		Black, not Hispanic		Hispanic		White, not Hispanic	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Percentage distribution												
Total	100.0	54.0	46.0	0.5	0.4	0.5	0.3	6.5	6.2	1.1	0.8	45.4	38.5
Agriculture	100.0	71.9	28.1	0.7	0.1	0.1	0.0	0.6	0.4	0.5	0.3	70.0	27.4
Distribution	100.0	36.2	63.8	0.3	0.5	0.3	1.5	2.2	3.7	0.6	1.2	32.8	56.9
Health	100.0	11.6	88.4	0.1	0.4	(*)	0.2	0.9	11.7	0.1	1.3	10.5	74.9
Consumer and homemaking	100.0	8.1	91.9	(*)	0.1	0	0.1	0.1	3.2	0	0.1	8.1	88.4
Occupational home economics	100.0	11.3	88.7	0	0.1	0.1	0.1	3.4	17.7	0.1	0.2	7.7	70.6
Industrial arts	100.0	75.5	24.5	0	0	0	0	0.2	0.5	0.5	0.7	74.8	23.3
Office occupations	100.0	17.6	82.4	0.1	1.0	0.2	0.3	1.8	14.1	0.2	1.5	15.3	65.4
Technical	100.0	88.1	11.9	0.5	(*)	1.1	0.2	8.8	1.8	1.2	0.2	76.6	9.6
Trade and industrial	100.0	86.3	13.7	0.8	0.1	0.7	0.1	12.2	1.9	2.1	0.4	70.3	11.2

(*)Less than 0.05%.

NOTE: Figures are based on enrollments at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 4.24
Distribution of vocational students in 2-year institutions of higher education, by sex and racial group by program area: Fall 1979

Program area	Total	Sex		Racial/ethnic group									
				American Ind./ Alaskan Native		Asian Am./ Pac. Isl.		Black, not Hispanic		Hispanic		White, not Hispanic	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Percentage distribution												
Total	100.0	49.5	50.5	0.5	0.5	1.6	1.3	4.9	5.9	3.0	2.9	39.5	39.9
Agriculture	100.0	67.7	32.3	1.1	0.3	0.9	0.4	2.3	0.9	2.6	0.8	60.8	29.9
Distribution	100.0	50.1	49.9	0.4	0.4	1.8	1.4	3.7	3.7	2.9	2.6	41.1	41.8
Health	100.0	17.3	82.7	0.2	0.7	0.4	1.4	1.6	7.8	1.0	3.1	14.1	69.7
Consumer and homemaking	100.0	30.7	69.3	0.2	0.6	0.6	1.3	0.9	2.9	0.9	5.1	28.2	59.5
Occupational home economics	100.0	14.9	85.1	0.2	1.0	0.4	1.6	1.9	12.3	0.9	6.3	11.5	64.0
Industrial arts	100.0	58.5	41.5	1.7	1.5	1.6	0.2	6.5	7.4	4.3	1.4	44.3	30.9
Office occupations	100.0	35.1	64.9	0.3	0.7	1.2	1.8	4.4	9.4	1.9	4.0	27.3	49.0
Technical	100.0	80.4	19.6	0.8	0.2	2.2	0.5	7.6	3.1	3.7	1.0	66.0	14.9
Trade and industrial	100.0	76.0	24.0	0.9	0.3	2.8	0.9	7.8	2.5	6.3	1.8	58.2	18.6

NOTE: Figures are based on enrollments at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 4.25
Percent of vocational students who are handicapped, in institutions with five or more vocational programs, by type of school and by program area: Fall 1979

Program area	All schools	Comprehensive and vocational high schools	Area vocational centers (secondary)	Area vocational schools (postsecondary)	2-Year institutions of higher education
All programs	2.5	2.6	4.1	2.8	1.3
Agriculture	3.1	3.1	5.6	3.0	1.7
Distribution	1.7	2.1	4.6	2.7	0.9
Health	1.9	2.5	4.2	2.3	1.3
Consumer and homemaking	2.3	2.4	4.3	0.0	0.5
Occupational home economics	4.0	3.9	9.2	1.6	1.8
Industrial arts	2.9	2.8	4.7	2.2	8.0
Office occupations	1.4	1.3	1.9	3.2	1.3
Technical	1.4	2.3	2.0	2.5	1.2
Trade and industrial	3.6	3.9	5.4	2.9	1.4

SOURCE: United States Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 4.26
Percent of vocational students who are limited-English-proficient, in institutions with five or more vocational programs, by type of school and by program area: Fall 1979

Program area	All schools	Comprehensive and vocational high schools	Area vocational centers (secondary)	Area vocational schools (postsecondary)	2-Year institutions of higher education
All programs	0.7	0.7	0.5	0.6	0.6
Agriculture	0.3	0.3	0.1	0.1	0.5
Distribution	0.3	0.3	0.4	0.4	0.3
Health	0.4	0.5	0.2	0.1	0.4
Consumer and homemaking	0.6	0.5	1.1	0.0	1.1
Occupational home economics	0.7	0.8	0.4	0.2	0.6
Industrial arts	0.6	0.6	0.6	0.0	0.1
Office occupations	0.7	0.7	0.4	0.2	0.5
Technical	0.7	0.6	0.1	0.7	0.7
Trade and industrial	0.8	1.0	0.3	0.9	0.7

SOURCE: United States Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

TABLE 4.27 -- STUDENTS BENEFITTING FROM VOCATIONAL EDUCATION PROGRAMS, BY SPECIFIC CONDITION AND BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	HANDICAPPED	DISADVANTAGED	LIMITED ENGLISH SPEAKING	WORK STUDY	SPECIAL DISADVANTAGED	ECON DEPRESSED AREAS
ALABAMA	3,881	39,089	4	374	576	48,986
ALASKA	45	8,097	68	0	26	9
ARIZONA	2,725	4,880	305	355	1,374	8,235
ARKANSAS	4,125	18,688	62	0	4,095	30,677
CALIFORNIA	24,689	155,307	15,966	4,305	30,191	166,892
COLORADO	2,097	5,865	218	225	119	3,926
CONNECTICUT	3,673	13,143	9	374	617	28,509
DELAWARE	1,011	1,039	15	58	367	1,108
DISTRICT OF COLUMBIA	514	1,150	83	20	637	7,360
FLORIDA	6,820	30,155	1,045	1,009	12,465	23,498
GEORGIA	3,962	16,145	0	0	0	37,945
HAWAII	2,152	16,262	201	301	444	10,418
IDAHO	403	1,566	15	112	145	7,203
ILLINOIS	27,561	115,357	2,472	1,925	2,105	26,021
INDIANA	4,420	5,476	84	689	3,841	27,082
IOWA	3,205	19,866	134	0	1,250	31,149
KANSAS	2,121	3,904	23	19	2,302	5,993
KENTUCKY	6,332	24,763	34	966	2,553	53,060
LOUISIANA	4,070	67,300	0	414	7,629	24,890
MAINE	325	1,957	0	147	119	7,636
MARYLAND	5,020	11,572	27	382	3,244	48,296
MASSACHUSETTS	3,874	8,679	501	0	761	28,243
MICHIGAN	4,077	11,877	258	0	1,399	4,309
MINNESOTA	5,741	8,553	225	0	2,074	16,011
MISSISSIPPI	3,079	7,957	0	0	1,304	2,372
MISSOURI	8,976	7,884	142	363	2,139	47,032
NEBRASKA	1,343	5,293	58	141	150	11,003
NEVADA	701	1,354	35	65	786	800
NEW HAMPSHIRE	498	1,113	0	0	864	5,391
NEW JERSEY	2,517	12,216	0	4,663	8,681	23,252
NEW MEXICO	1,142	6,917	1,660	0	186	10,972
NEW YORK	13,086	73,433	5,473	2,308	9,180	122,111
NORTH CAROLINA	10,065	40,559	1,902	1,119	3,296	19,886
NORTH DAKOTA	390	3,098	18	150	112	4,242
OHIO	9,004	34,362	92	1,053	1,436	104,454
OKLAHOMA	3,014	5,358	1	332	2,598	29,696
OREGON	2,723	10,472	141	18	890	3,270
PENNSYLVANIA	8,032	14,071	143	516	3,662	93,644
RHODE ISLAND	1,782	4,018	30	116	122	1,709
SOUTH CAROLINA	3,955	15,184	0	251	701	35,503
SOUTH DAKOTA	234	1,029	0	80	65	1,872
TENNESSEE	6,830	19,107	631	904	1,925	44,499
TEXAS	7,070	34,358	796	1,151	1,467	143,393
UTAH	1,626	3,096	602	0	3,857	5,679
VERMONT	530	1,740	96	0	10	2,303
VIRGINIA	9,107	18,737	515	1,002	1,808	24,070
WASHINGTON	6,810	25,133	93	219	1,708	16,076
WEST VIRGINIA	2,533	7,310	19	336	824	16,732
WISCONSIN	5,651	24,360	7,321	722	5,718	18,761
WYOMING	208	625	0	0	976	2,182
TOTAL U.S.	234,341	972,438	41,590	27,632	136,806	1,429,744
AMERICAN SAMOA	16	1,957	1,435	35	38	513
GUAM	58	0	440	101	354	954
PUERTO RICO	1,573	24,570	642	216	15,772	20,518
OUTLYING AREAS	1,647	26,527	2,517	352	16,164	21,985
U.S. & OUTLYING AREAS	235,988	998,965	44,107	27,984	152,970	1,451,729

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

Chapter 5

Vocational Education Facilities

The condition of facilities is important in considering access to vocational education in the future. Clearly, the nation's institutions cannot offer vocational education training programs without adequate facilities. While information is not available on the extent and condition of all facilities (public and private) which offer vocational education programs, information is available for those institutions which are eligible for construction funds under the Vocational Education Act (VEA). These institutions - referred to as "area vocational schools" in the VEA - include:

(a) A specialized high school used exclusively or principally for the provision of vocational education;

(b) The department of a high school exclusively or principally used for providing vocational education in no less than five different occupational fields;

(c) A technical or vocational school used exclusively or principally for the provision of vocational education; or,

(d) The department or division of a junior college or community college or university which provides vocational education in more than five different occupational fields.

A survey of State agencies responsible for the administration of vocational education identified over 7,500 institutions meeting these criteria.[1] The universe of interest for the study was defined as "all public secondary, and 2-year postsecondary institutions having five or more shop/laboratories/classroom facilities in different program areas in vocational technical education and administered by public school systems or as free-standing 2-year postsecondary educational institutions or systems". Included in the study were 4,878 comprehensive high schools, 225 vocational high schools, 1,248 area vocational centers (secondary), 310 area vocational schools (postsecondary), 162 technical institutes, and 720 community and junior colleges.

Area vocational education institutions are widely distributed across regions. However, variations in the program offerings of institutions affect student access to vocational education. Institutions offering postsecondary vocational education (area vocational schools, technical institutes, and community colleges) and secondary vocational education through regional area vocational centers are concentrated in multi-town service areas. Nearly 40 percent of each of these types of institutions are located in these service areas (table 5.1).

Many of the institutions serve medium and small towns and rural populations (areas having a population of under 100,000). Just over 60 percent of the secondary institutions (providing 56 percent of the secondary instructional stations) and 28 percent of the postsecondary institutions (providing 22 percent of the postsecondary instructional stations) serve these populations (chart 5.1 and table 5.2). In comparison, less than 27 percent of the population live in areas of under 100,000 persons. This analysis does not include an assessment of the location of competing providers of vocational education (such as proprietary schools) which serve predominantly urban/suburban populations. While the data suggest that some success has

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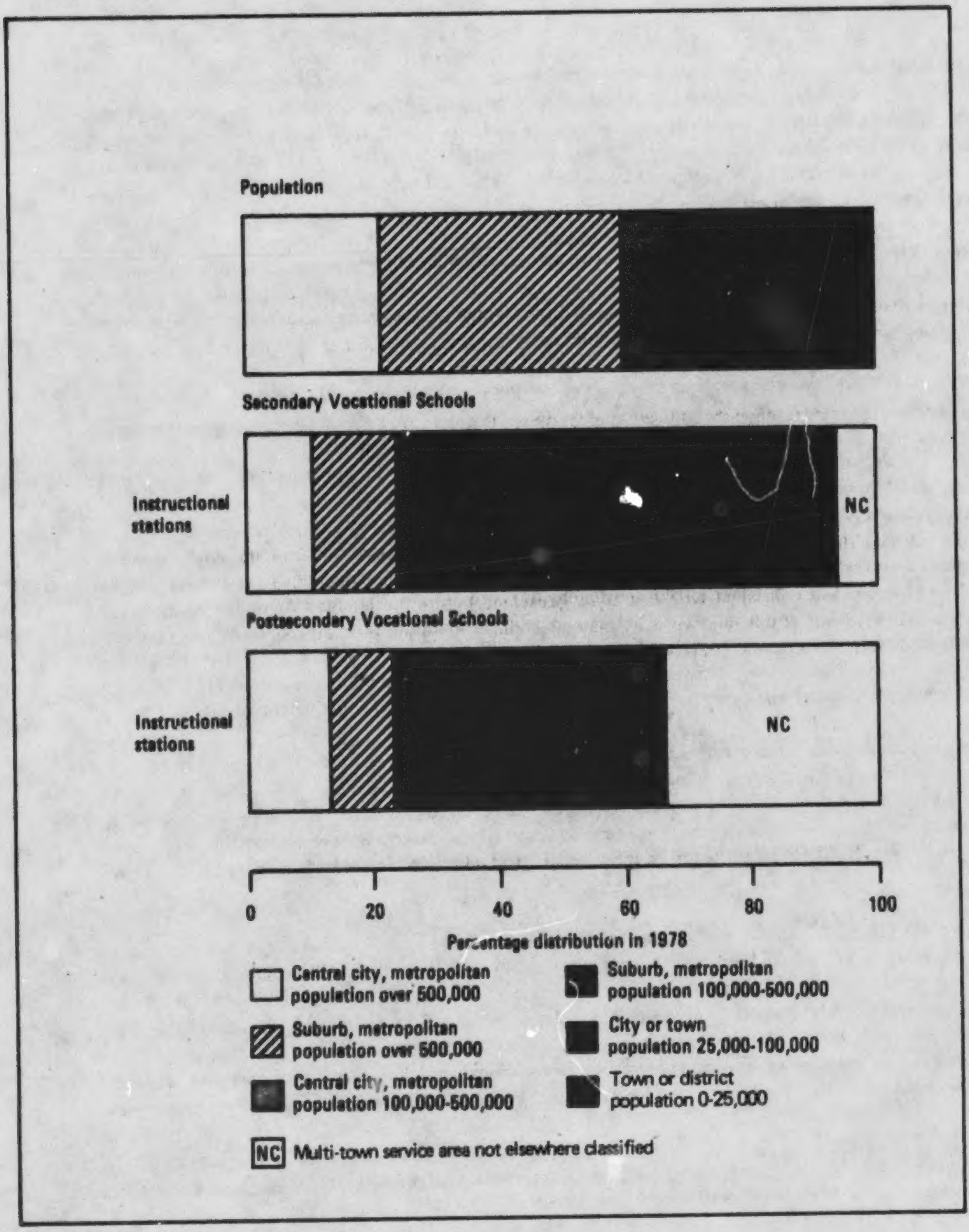
[1] The data and conclusions presented in this chapter are drawn from the final report of survey results prepared for the U.S. Department of Health, Education, and Welfare, Office of Planning, Budget, and Evaluation. Institutional Development Associates, Inc. and Westat, Inc., *National Study of Vocational Education Systems and Facilities*, October 1978.

Chart 5.1
Population and Instructional Stations in Vocational Education Institutions Offering Five or More Programs



SOURCE: Table 5.2

been achieved in providing access to rural populations, rural students do not have the same access to the diversity of institutions that urban students have (chart 5.2).

Data on the construction of new facilities and additions to existing facilities since the passage of the VEA in 1963, which provided funds for the construction of facilites, demonstrate an emphasis on providing access to rural populations. According to testimony presented before the House Committee on Education and Labor in 1976, the construction funds "opened up the possibility of participating in vocational education for the first time to millions of students and adults in smaller school districts and in rural areas." At least 3,150 construction projects affecting almost 2,200 institutions were carried out between 1965 and 1976 (table 5.3). Of these, 72 percent of both the secondary and the postsecondary projects affected other than urban or suburban populations.

The need for further construction of area vocational facilities cannot be determined without considering the capacity, utilization, and condition of existing structures. In terms of capacity, the "average" area vocational facility houses over 18 shops and laboratories (table 5.4). In general, postsecondary institutions are larger than secondary institutions. As one might expect, the non-urban facilities have fewer shops and laboratories than urban/suburban institutions, particularly at the postsecondary level (table 5.5). However, the large number of institutions in the non-urban areas offset this size factor so that non-urban areas have the majority of the instructional stations.

The following factors affect the utilization of facilities: the number of shops, laboratories or classrooms; the capacity of each type space; the exposure per student per day to the shop, laboratory, or classroom; and the number of students served per day by type of space. The formulation of a measure of utilization permits the comparison of institutional types.[1] The resulting computations suggest that secondary facilities — particularly comprehensive high schools — experience the highest levels of utilization (table 5.6). This is despite the fact that postsecondary facilities are generally utilized more hours of the day (table 5.7). These utilization rates are not consistent with the experience of many vocational education program specialists, nor are they consistent with testimony presented before the House Committee on Education and Labor in 1976. Part of this inconsistency may be attributable to the great diversity of "hours per class session" which apply to different courses in different institutions.

Another aspect of utilization is the use of school facilities for extended day, evening, Saturday, and summer sessions as well as the use of the facilities by non-public institutions and other agencies or organizations. Almost half of the secondary vocational education schools conduct extended day and Saturday sessions, two-thirds hold summer sessions, and almost 80 percent conduct evening classes. At the postsecondary level, approximately 60 percent of the institutions conduct extended day and Saturday sessions, and virtually all hold evening and summer sessions (table 5.8).

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[1] A utilization level U was defined as follows:

$$U = \frac{E}{\sum_{i=1}^{m} C_i n_i f_i} \times [100]$$

where: E = total number of students served daily by all vocational shops, laboratories or classrooms

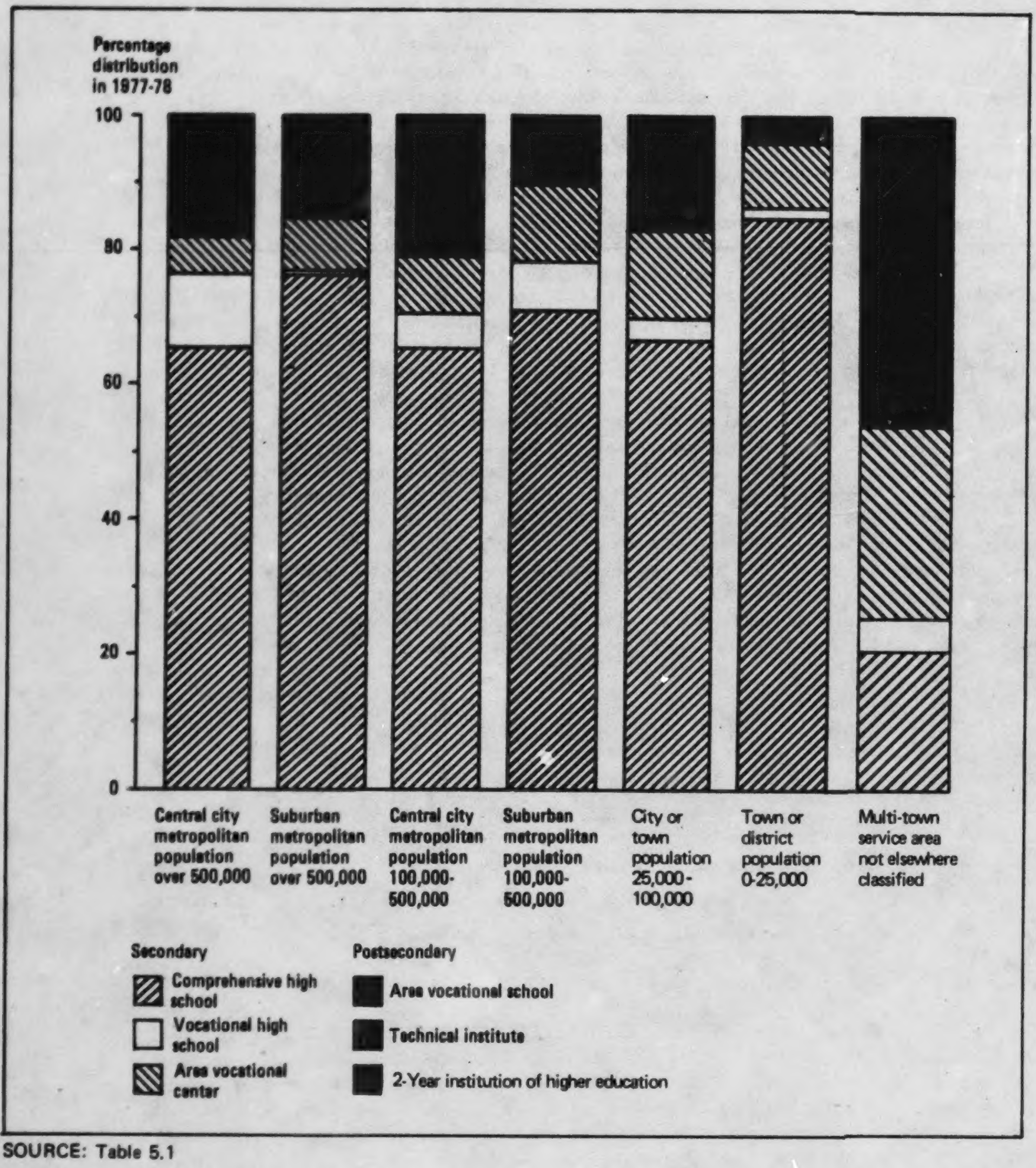
n_i = number of shops, laboratories or classrooms for program i

C_i = total capacity (in stations) per shop, laboratory or classroom of type i

f_i = number of class sessions in facility i per day ("f" is computed as the total daily operating hours of institutions ÷ hours per class session), and

m = number of programs at the school.

Chart 5.2
Vocational Schools, by Type of Region Served

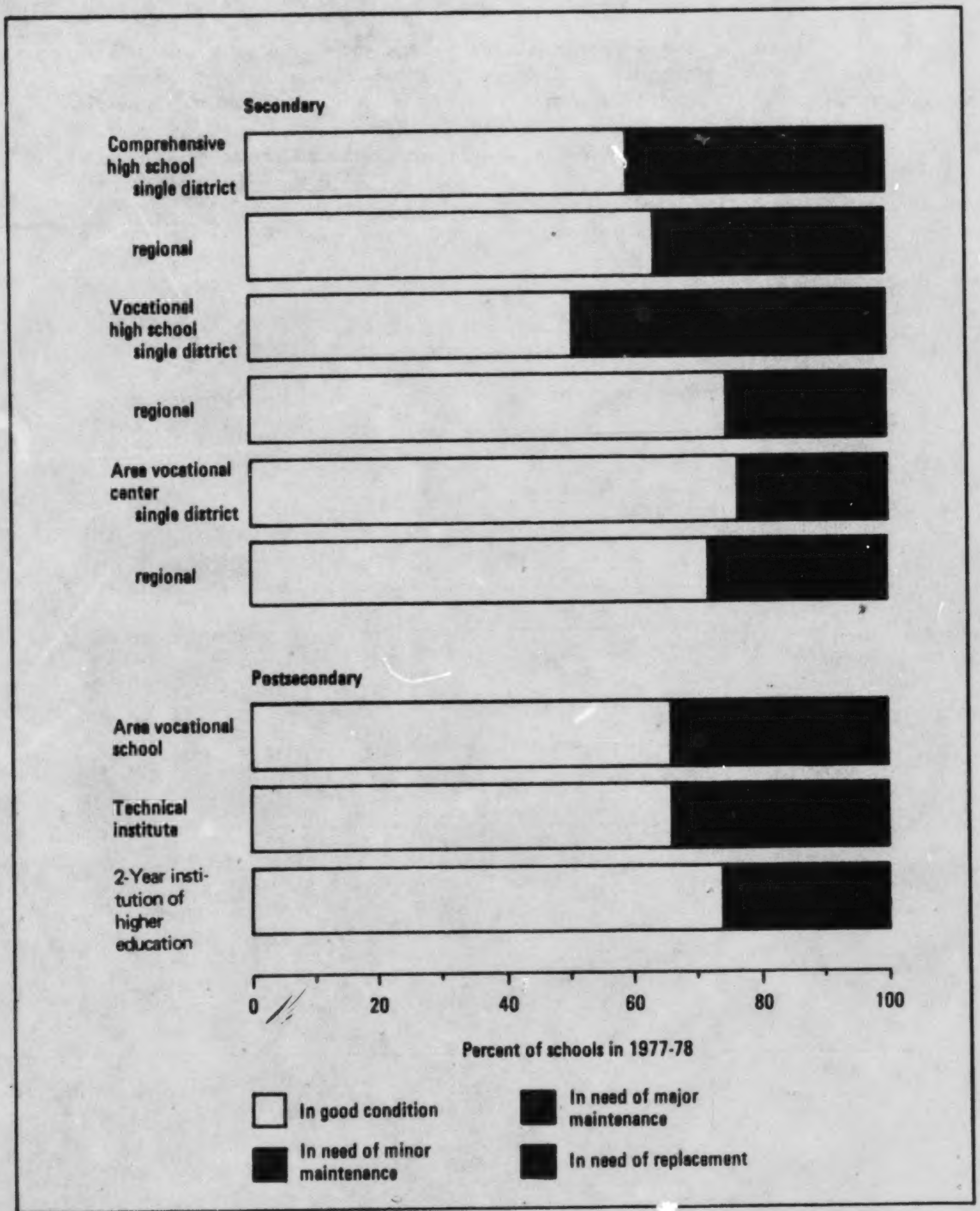


SOURCE: Table 5.1

The lower utilization rates at the postsecondary level are further offset by the use of those facilities by non-public institutions and other agencies/organizations. Over three-fourths of the postsecondary facilities are utilized by manpower programs such as CETA, and half of the postsecondary institutions are used by industrial training programs and adult programs not administered by the vocational education department of the school (table 5.9).

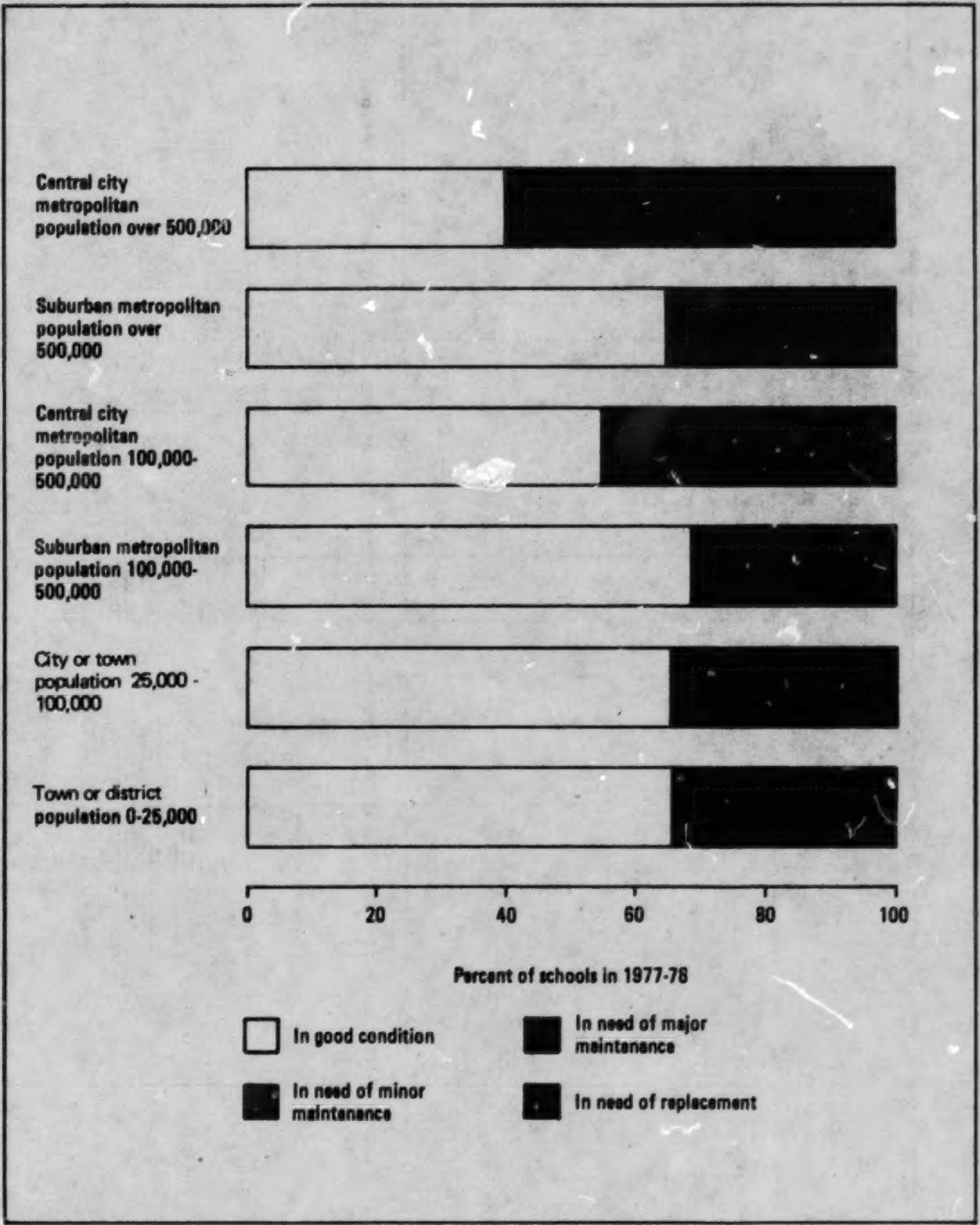
The condition of existing facilities is a third factor in evaluating construction needs. Overall, 88 percent of the institutions in the facilities study responded that their facilities were in good condition or in need of only minor maintenance (table 5.10). Most types of institutions reported that their facilities were in this condition, except single district vocational high schools and postsecondary technical institutes which reported 25 and 18 percent, respectively, of their facilities were in need of major maintenance or replacement (chart 5.3). Clearly the facilities in the central city metropolitan areas are in the worst condition, with 22 percent of the facilities serving populations over 500,000 and 15 percent of the facilities serving populations between 100,000 and 500,000 in need of major repair or replacement (chart 5.4 and table 5.11).

Chart 5.3
Reported Condition of Vocational Education Institutions, by Type of Institution



SOURCE: Table 5.10

Chart 5.4
Reported Condition of Vocational Education Institutions, by Type of Region Served



SOURCE: Table 5.11

Table 5.1
Schools with five or more vocational programs, by type of institution and region served: 1977-78

Institutional type		Total	Region						
			Central city metro area over 500,000	Suburb metro area over 500,000	Central city metro area 100,000 - 500,000	Suburb metro area 100,000 - 500,000	City or town 25,000 - 100,000	Town or district 0 - 25,000	Multi-town service area
Comprehensive high school	Single district	4,092	329	484	277	206	679	1,957	160
	Regional	422	34	47	29	20	83	178	31
Vocational high school	Single district	86	39	2	13	3	16	7	6
	Regional	131	21	4	12	14	22	16	42
Area vocational center	Single district	237	17	15	20	13	46	95	31
	Regional	592	13	45	17	21	112	149	235
Area vocational school		260	12	12	22	5	55	49	105
Technical institute		146	12	6	20	4	23	10	71
Community college		694	79	92	60	24	119	56	264

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Planning, Budgeting and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Table 5.2
Institutions and instructional stations compared with population, by type of region for secondary and postsecondary schools: 1977-78

	Population	Institutions		Instructional stations
Region	Percent	Number	Percent	Percent
	SECONDARY			
Total	100.0	5,560	100.0	100.0
Central city, metropolitan population over 500,000	22.8	453	8.1	10.6
Suburb, metropolitan population over 500,000	38.0	597	10.7	13.5
Central city, metropolitan population 100,000-500,000	8.9	368	6.6	8.2
Suburb, metropolitan population 100,000-500,000	3.6	277	5.0	6.1
City or town population 25-100,000	3.1	958	17.3	21.4
Town or district population 0-25,000	23.6	2,402	43.2	34.5
Multi-town service area	NA	505	9.1	5.7
	POSTSECONDARY			
Total	100.0	1,100	100.0	100.0
Central city, metropolitan population over 500,000	22.8	103	9.3	13.3
Suburb, metropolitan population over 500,000	38.0	110	10.0	10.5
Central city, metropolitan population 100,000-500,000	8.9	102	9.3	17.1
Suburb, metropolitan population 100,000-500,000	3.6	33	3.1	2.9
City or town population 25-100,000	3.1	197	17.8	15.5
Town or district population 0-25,000	23.6	115	10.5	6.7
Multi-town service area	NA	440	40.0	34.0

SOURCE: U.S. Department of Health, Education, & Welfare, Office of Planning, Budgeting and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Table 5.3
New facility construction and additions, by type of region for secondary and postsecondary schools: 1965 through 1976

Region	Projects		Institutions	
	Number	Percent	Number	Percent
SECONDARY				
Total	1,934	100.0	1,567	100.0
Central city, metropolitan population over 500,000	83	4.3	72	4.6
Suburb, metropolitan population over 500,000	201	10.4	159	10.1
Central city, metropolitan population 100-500,000	147	7.6	108	6.9
Suburb, metropolitan population 100-500,000	105	5.4	84	5.6
City or town population 25-100,000	371	19.2	299	19.1
Town or district population 0-25,000	702	36.3	597	38.0
Multi-town service area	325	16.8	248	15.7
POSTSECONDARY				
Total	1,216	100.0	610	100.0
Central city, metropolitan population over 500,000	81	6.7	42	6.9
Suburb, metropolitan population over 500,000	107	8.8	54	8.9
Central city, metropolitan population 100-500,000	114	9.4	53	8.9
Suburb, metropolitan population 100-500,000	34	2.8	17	2.8
City or town population 25-100,000	232	19.2	120	19.5
Town or district population 0-25,000	118	9.7	54	8.9
Multi-town service area	530	43.4	270	44.1

SOURCE: U.S. Department of Health, Education, & Welfare, Office of Planning, Budgeting and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Table 5.4
Vocational education shops and laboratories, by institutional type: 1977-78

Institutional type		Number of shops and laboratories														
		5	6	7	8	9	10-11	12-13	14-15	16-20	21-25	25-30	31-35	35-40	40+	Average
Total		202	226	262	266	317	651	632	684	1234	704	431	239	129	343	18.36
Comprehensive high school	Single district	137	159	192	184	215	452	449	467	772	410	199	67	31	52	15.29
	Regional	16	17	12	14	30	39	47	55	87	38	27	12	8	11	16.53
Vocational high school	Single district	0	1	2	0	3	6	9	6	16	16	7	5	4	10	23.63
	Regional	3	0	0	4	2	7	7	10	28	14	15	15	11	20	26.56
Area vocational center	Single district	10	8	9	16	13	25	25	20	55	26	10	8	5	5	16.18
	Regional	16	22	24	22	30	58	40	55	113	79	54	29	12	31	18.92
Area vocational school		3	3	6	8	9	13	20	17	39	25	29	26	14	48	28.51
Technical institute		0	2	2	3	2	8	1	9	31	16	24	9	9	25	30.85
Community college		17	14	15	15	13	43	34	49	93	80	66	68	35	141	27.92

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Planning, Budgeting, and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Table 5.5
Average number of vocational education shops and laboratories, by type of region served by institutional type: 1977-78

Institutional type		Central city metro area over 500,000	Suburb metro area over 500,000	Central city metro area 100-500,000	Suburb metro area 100-500,000	City or town 25-100,000	Town/ district 0-25,000	Multi-town service area	Weighted average
Comprehensive high school	Single district	18.6	17.6	17.7	17.1	18.3	12.5	13.9	15.29
	regional	22.6	17.8	18.1	12.2*	18.0	14.4	17.8	16.53
Vocational high school	Single district	24.8	42.0*	29.8	36.7*	17.3	14.0*	19.0*	23.63
	regional	26.1	52.0*	26.6	28.5*	24.2	17.8	25.4	26.56
Area vocational center	Single district	21.1	21.4	19.9	14.8*	16.9	13.1	16.5	16.18
	regional	23.4	24.1	29.1	28.3	21.3	14.2	18.0	18.92
Area vocational school		55.4*	48.1*	40.2	28.2	28.9	20.5*	24.3	28.51
Technical institute		42.9	50.8*	37.4	20.8*	22.4	20.1	30.6	30.85
Community college		41.6*	28.4	35.9	30.7	26.1	17.1	24.9	27.92

*Data are based on ten or fewer institutions. Unusual conditions relating to one or more institutions may have anomalistic effect on the data presented.

SOURCE: U.S. Department of Health, Education, & Welfare, Office of Planning, Budgeting and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Table 5.6
Estimated average percentage level of utilization of facilities for type of region served, by institutional type: 1977-78

Institutional type		Region served							
		Central city metro area over 500,000	Suburb metro area over 500,000	Central city metro area 100,000 - 500,000	Suburb metro area 100,000 - 500,000	City or town 25,000 - 100,000	Town or district 0 - 25,000	Multi-town service area	Weighted average
Comprehensive high school	Single district	85.5	*	90.9	91.0	92.9	88.5	79.5	86.6
	Regional	87.4	77.1	97.3	76.4	84.3	78.5	77.1	80.6
Vocational high school	Single district	80.0	50.5	61.6	59.9	57.9	45.0	73.2	69.0
	Regional	70.1	65.6	66.4	63.4	63.2	54.7	45.5	59.4
Area vocational center	Single district	98.8	68.3	60.9	81.2	68.0	84.0	62.0	69.8
	Regional	47.8	66.2	76.4	75.4	63.9	68.6	59.1	65.1
Area vocational school		54.1	58.3	47.9	52.6	44.5	41.5	45.6	45.4
Technical institute		48.9	60.4	46.5	82.7	52.6	42.4	38.1	46.4
Community college		70.4	63.5	59.5	78.1	48.5	43.7	37.9	52.2

*Formula used to compute utilization resulted in rate over 100 percent (102.9).

NOTE: The following hours per class session were used in calculating utilization rates:

	Agri.	Home Ec.	Dist. Ed.	Health	Bus./Off.	Tech./Trade
Secondary	2	2	2	2	1.5	3
Postsecondary	3	3	2	3	1.5	3

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Planning, Budgeting and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Table 5.7
Average hours of daily utilization of facilities for type of region served, by institutional type: 1977-78

Institutional type		Central city over 500,000	Suburb over 500,000	Central city 100,000 - 500,000	Suburb 100,000 - 500,000	City or town 25,000 - 100,000	Town/district 0 - 25,000	Multi-town service area
Comprehensive high school	Single district	7.9	7.9	7.6	7.9	7.9	7.6	7.5
	regional	7.6	8.4	8.0	8.5	8.2	7.7	8.3
Vocational high school	Single district	8.5	9.8	10.0	8.9	8.8	8.1	7.25
	regional	9.2	11.2	9.8	10.6	8.9	8.6	10.1
Area vocational center	Single district	10.2	10.0	8.9	9.4	9.3	9.2	9.0
	regional	8.7	10.6	9.5	11.2	9.8	9.4	12.4
Area vocational school		9.0	12.8	9.5	8.9	10.6	10.0	11.1
Technical institute		10.6	13.2	11.8	13.4	11.4	11.9	12.3
Community college		11.2	12.3	12.1	10.7	11.6	10.7	11.5

SOURCE: U.S. Department of Health, Education, & Welfare, Office of Planning, Budgeting and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Table 5.8
Use of vocational school facilities for extended day, evening, Saturday, and summer sessions: 1977-78

Institutional type		Schedule/session operated			
		Extended day[1]	Evening[2]	Saturday	Summer
		Percent of institutions			
Comprehensive high School	Single district	48.2	76.7	45.0	67.2
	regional	52.1	83.6	48.0	67.8
Vocational high school	Single district	42.7	81.7	34.6	49.4
	regional	59.4	96.4	43.1	65.4
Area vocational center	Single district	36.2	91.4	28.7	57.0
	regional	41.6	93.4	34.2	55.2
Area vocational school		60.5	98.9	46.0	90.9
Technical institute		60.3	99.3	52.1	98.6
Community college		75.0	99.6	70.1	98.6

[1] EXTENDED DAY, AFTERNOON SESSION: An afternoon program offered after the regular day session has ended, but before six o'clock in the evening and serving different types of students by offering programs which differ from the regular day program.

[2] EVENING PROGRAM: As designated by this institution. If no local definition exists, "evening program" will mean a program of instruction offered after six o'clock in the afternoon.

SOURCE: U.S. Department of Health, Education, & Welfare, Office of Planning, Budgeting and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Table 5.9
Use of non-educational facilities by educational institutions: 1977-78

Institutional type		Percent of institutions reporting	Percent of institutions using resources			
			CETA skill centers	Job Corps centers	Private, non-profit training facilities	Armories or military bases
Comprehensive high school	Single district	63.2	12.4	2.8	11.3	4.4
	regional	73.0	7.6	1.2	11.8	2.9
Vocational high school	Single district	61.8	11.9	2.4	14.3	7.1
	regional	68.1	7.8	1.6	14.1	7.8
Area vocational center	Single district	76.8	14.4	0.0	11.5	2.2
	regional	80.7	9.4	0.3	6.9	3.9
Area vocational school		85.3	15.2	1.3	12.6	6.6
Technical institute		83.8	10.8	0.0	20.4	7.5
Community college		90.7	12.2	1.5	19.7	18.3

SOURCE: U.S. Department of Health, Education, & Welfare, Office of Planning, Budgeting and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Table 5.10
Institutions and condition, by institutional type: 1977-78

Institutional type		Institutions			Institutional condition							
					In good condition		In need of minor maintenance		In need of major maintenance		In need of replacement	
		Total	Responding	Percent responding	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All institutions		6,660	3,984	60	4,243	64	1,635	24	438	7	344	5
Comprehensive high school	Single district	4,092	2,173	53	2,437	60	1,158	28	297	7	200	5
	Regional	422	237	56	270	64	107	25	26	6	19	5
Vocational high school	Single district	86	63	73	44	51	21	24	9	11	12	14
	Regional	131	93	71	98	75	18	14	9	7	6	4
Area vocational center	Single district	237	195	82	183	77	33	14	15	6	6	3
	Regional	592	463	78	428	72	115	20	20	3	29	5
Area vocational school		260	183	70	171	66	55	21	26	10	8	3
Technical institute		146	112	77	97	66	24	16	8	6	17	12
Community college		694	465	67	515	74	104	15	28	4	47	7

NOTE: Figures in this table are estimated from the responses of 3,984 institutions (approximately 60 percent). No evidence was found that suggests that institutions not responding to the question on which this table is based differ significantly from responding institutions.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Planning, Budgeting, and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Table 5.11
Institutions and condition, by type of region served: 1977-78

Region	Institutions			Institutional condition							
				In good condition		In need of minor maintenance		In need of major maintenance		In need of replacement	
	Total	Responding	Percent responding	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All institutions	6,660	3,984	60	4,243	64	1,635	24	438	7	344	5
Central city metropolitan population over 500,000	556	312	56	220	40	211	36	74	13	51	9
Suburban metropolitan population over 500,000	707	429	61	458	65	186	26	47	7	16	2
Central city metropolitan population 100-500,000	470	258	55	257	55	141	30	49	10	23	5
Suburban metropolitan population 100-500,000	310	215	69	213	69	75	24	14	4	8	3
City or town population 25,000-100,000	1,155	686	59	764	66	262	23	74	6	55	5
Town or district population 0-25,000	2,517	1,399	56	1,670	66	570	23	138	5	139	6
Multi-town service area	945	685	72	661	70	190	20	42	4	52	6

NOTE: Figures in this table are estimated from the responses of 3,984 institutions (approximately 60 percent). No evidence was found that suggests that institutions not responding to the question on which this table is based differ significantly from responding institutions.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Planning, Budgeting and Evaluation, National Study of Vocational Education Systems and Facilities, October 1978.

Chapter 6

Vocational Education Staff

The recent rapid expansion of vocational education opportunities has been paralleled by increases in staff at all levels. A profile of staff characteristics suggests, however, that there has been only limited success in providing staff which mirror the heterogeneous nature of the students they instruct.

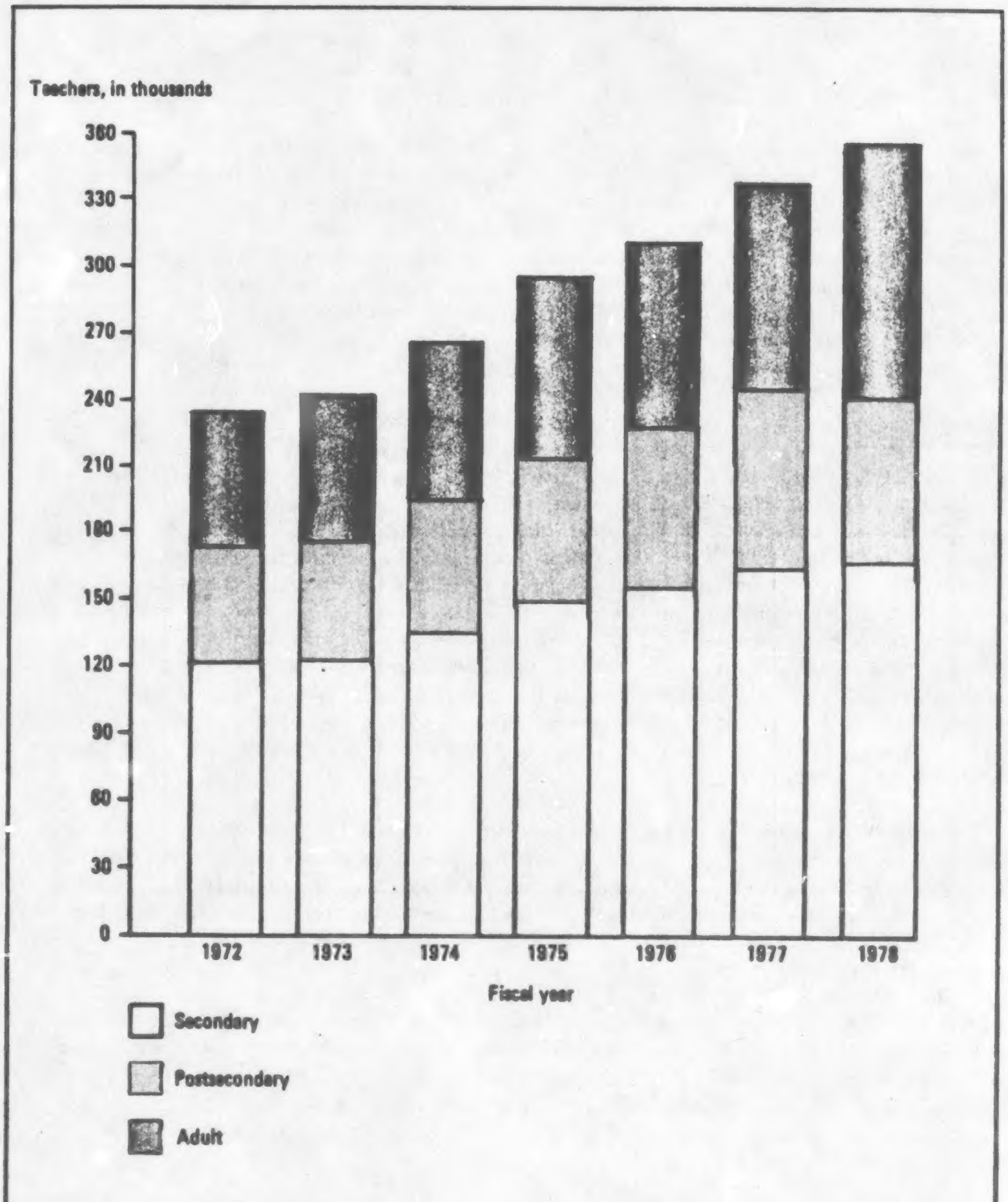
Trends in the numbers of instructional staff providing vocational education through programs administered under the Vocational Education Act reflect the substantial growth in vocational education at all levels in the 1970's. Since 1972, the total number of instructional staff has grown by over 50 percent, from about 236,000 to more than 354,000 in 1978 (table 6.1). These instructors serve secondary, postsecondary, and adult students. Examination of these totals by program level shows an increase in absolute numbers for all levels, but also the relatively faster growth in the adult area, where the share of the total headcount of vocational staff increased from 26.4 to 32.1 percent between 1972 and 1978 (chart 6.1). The share of instructors at the secondary level decreased slightly, though secondary continued to comprise the largest single share of instructional staff by a substantial margin.

Comparisons of headcounts by level and estimates of full-time equivalent (FTE) staff by level reveal strikingly different patterns in the employment status of instructors. Postsecondary and adult vocational education instruction is supplied to a much greater extent by part-time instructors than is the case at the secondary level (chart 6.2). When calculated as full-time equivalents, the number of total staff for 1978 reduces to 264,729, down from 354,175. The percent for FTE secondary instructors in 1978 is 84.3 percent of the headcount estimate of staff at that level. More dramatically, the estimate for postsecondary FTE reduces to 69.7 percent of its total staff, and the estimate for adult FTE reduces to 43.3 percent of the headcount figure. Shares of instructional staff by level also shift when total figures are reduced to FTE, with a majority of 58.4 percent of the FTE instruction being devoted to the secondary level. Despite its substantial proportion, this percent does represent a slight decrease in the share of teachers providing secondary-level instruction since 1972, attributable to the corresponding increase in adult offerings. Total and FTE numbers of staff are available for 1979, by State (tables 6.2 and 6.3). While this information supplies detail by program area and not by instructional level, the totals for headcount and FTE numbers continue the patterns already described.

Profiles of staff by racial/ethnic designation and sex are available for four types of institutions providing vocational instruction. Full-time vocational staff in institutions offering five or more programs are dominated by white, not Hispanic, persons in the three personnel categories of instructional, program/support, and program/supervisory (tables 6.4 and 6.8). The two types of postsecondary institutions studied, area vocational schools and 2-year institutions of higher education, each report fewer than nine percent of instructional staff from minority groups.

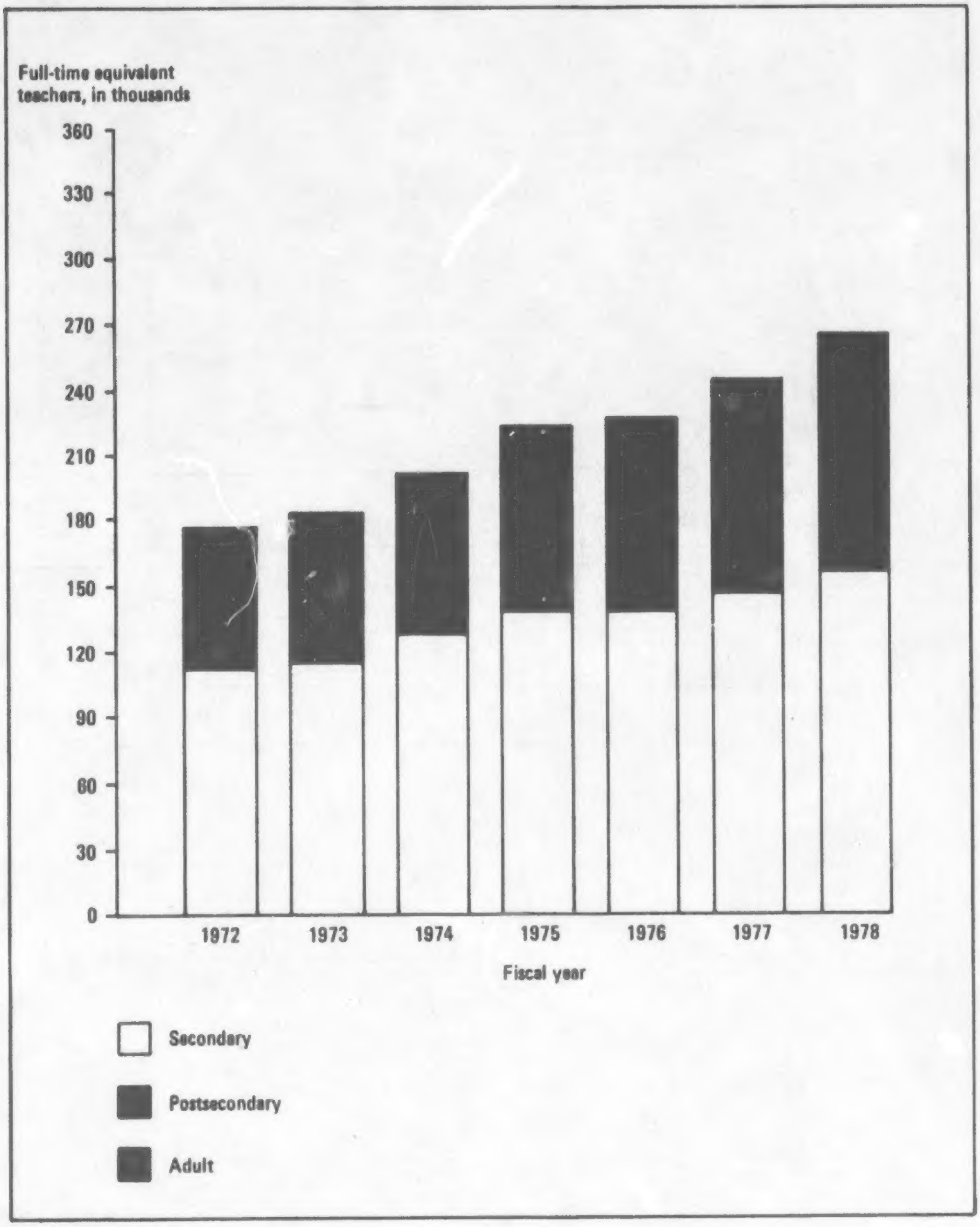
Of the four types of schools, comprehensive and vocational high schools in fall 1979 had the highest percentage of instructional staff who were members of minority groups (chart 6.3). A total of 14 percent of the full-time instructional staff in these secondary schools were members of minority groups. The minority staff were predominantly black: 11.3 percent of total instructional staff were black, not Hispanic, while American Indian/Alaskan Natives comprised 0.3 percent; Asian American or Pacific Islanders 0.7 percent; and Hispanics, 1.7 percent.

Chart 6.1
Total Number of Teachers of Vocational Education (VEA), by Level



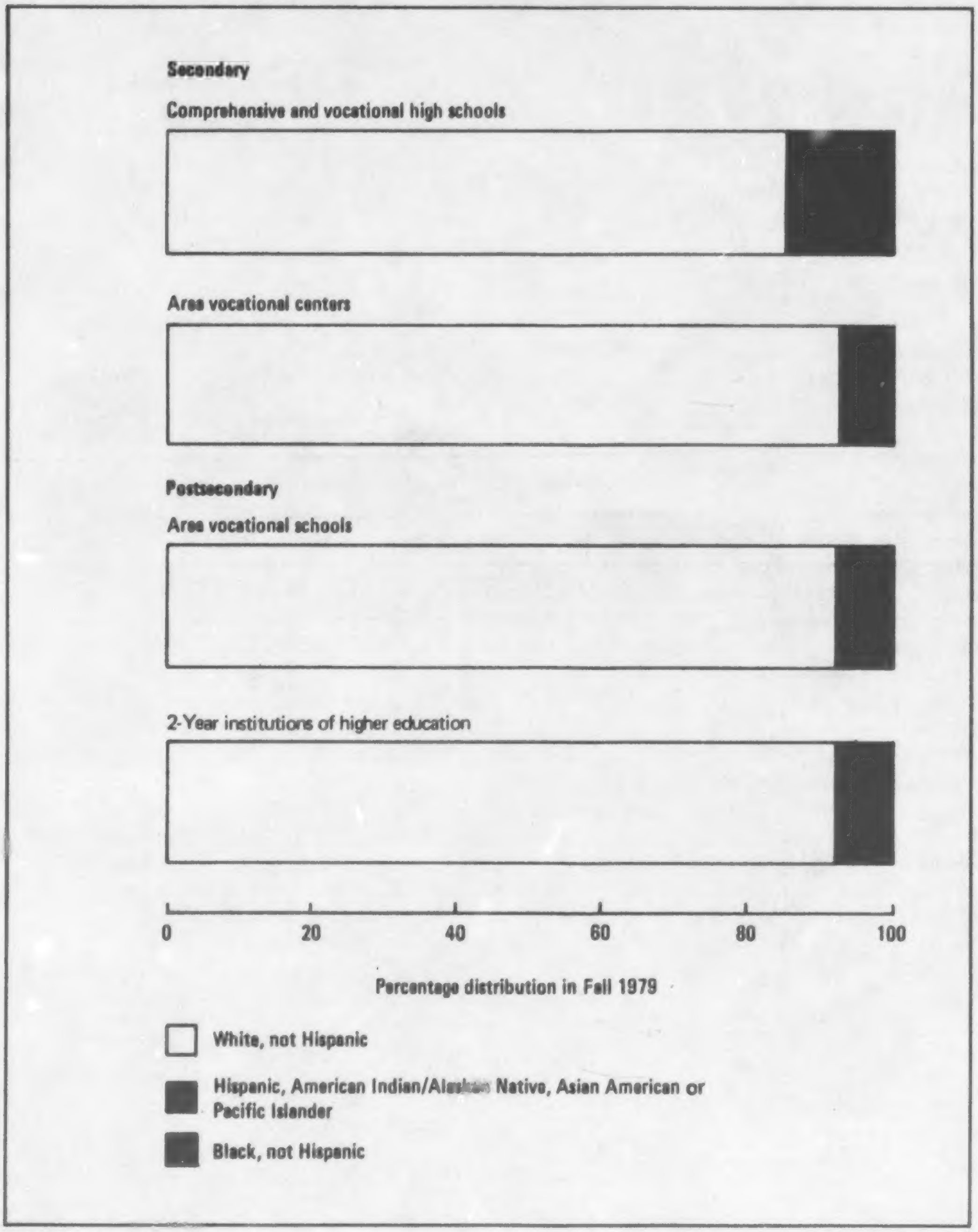
SOURCE: Table 6.1

Chart 6.2
Full-Time Equivalent Teachers of Vocational Education (VEA), by Level



SOURCE: Table 6.1

Chart 6.3
Racial/Ethnic Distribution of Instructional Staff in Institutions Offering Five or More Vocational Education Programs



SOURCE: Tables 6.5 to 6.8

Further scrutiny of racial/ethnic characteristics of vocational staff in comprehensive and vocational high schools suggests that minority staff are concentrated in certain instructional fields. Minorities comprise more than 15 percent of the staff in the fields of Occupational Home Economics, Office Occupations, and Consumer and Homemaking. Minorities hold smaller percentages of the full-time instructional positions in area vocational centers. Postsecondary institutions showed similar profiles, with minority staff having their highest proportions, nine percent or more of positions, in Occupational Home Economics, Consumer and Homemaking, and Industrial Arts, in both area vocational schools and 2-year institutions of higher education.

The predominance of traditional sex distributions in instructional areas is evident among all types of schools. Males hold substantial majorities of positions in the program areas of Agriculture, Distribution, Technical, Trade and Industrial, and Industrial Arts. Females hold similarly sizeable majorities of the positions in the Health, Occupaional Home Economics, Office Occupations, and Consumer and Homemaking program areas. A single exception to the pattern of female majorities is found in 2-year institutions of higher education staff teaching in the area of Office Occupations, where only 45.9 percent are female (chart 6.4).

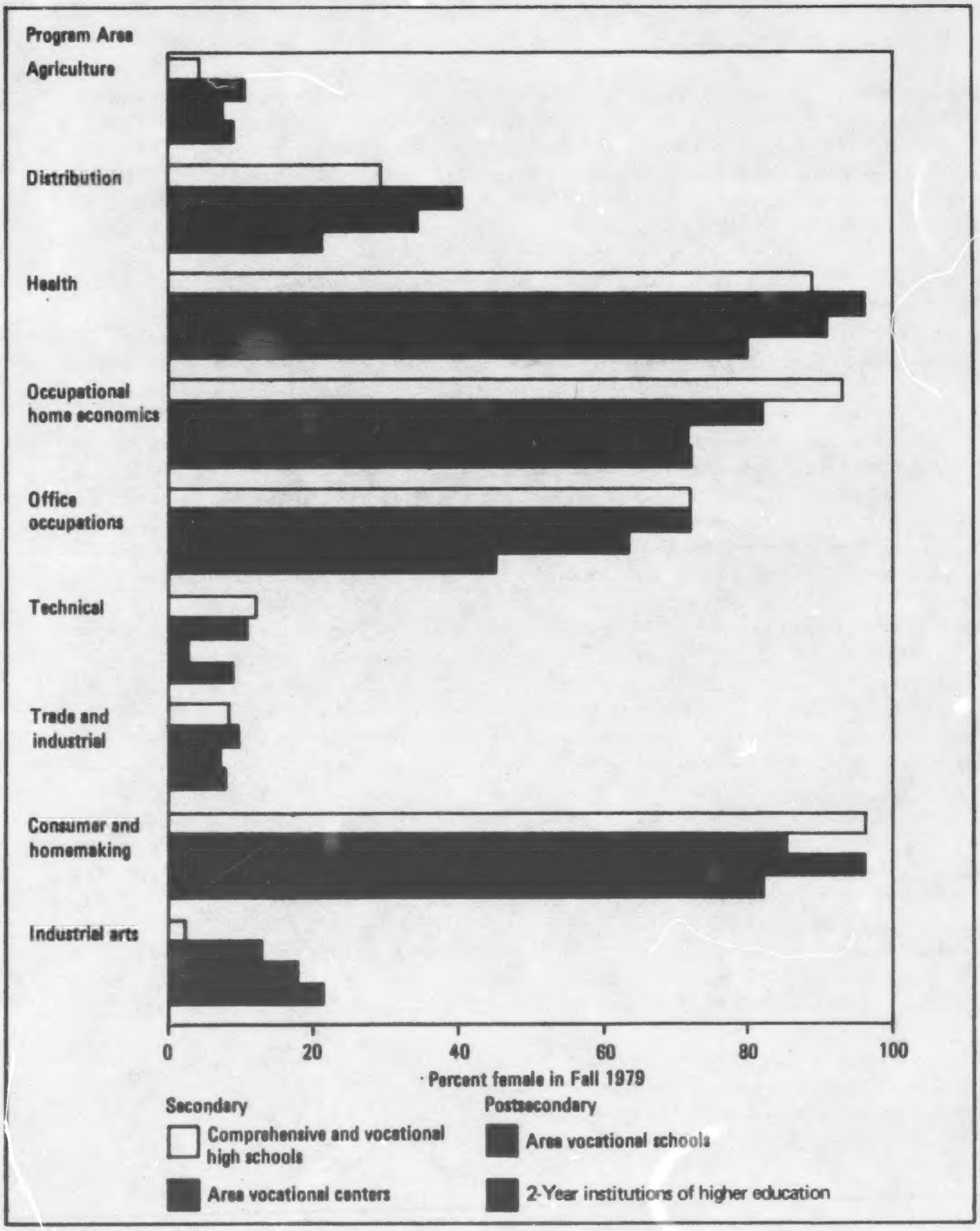
Vocational program/supervisory staff positions show even greater dominance by males than is observed in traditionally male instructional areas. Males hold more than 80 percent of supervisory positions in the two types of secondary schools and in area vocational schools. Only in 2-year institutions of higher education are fewer than three-fourths (72.3 percent) of the supervisory positions held by males.

Similar patterns of dominance of a single sex over types of positions are evident in examining the group of noncollegiate postsecondary schools with occupational programs. While the public schools from this group include some of the postsecondary area vocational schools reviewed earlier, the two groups of public schools are not identical. The private schools in this group are not included in the programs under the jurisdiction of State Boards of Vocational Education, so the more than 66,000 instructional staff in private noncollegiate schools are not counted in the total numbers of staff in VEA programs cited earlier. An examination of the staff in these noncollegiate schools reveals that among instructional and administrative staff in public schools, females hold substantial margins in allied health schools, with 95.5 and 71.2 percent of the staff positions, respectively (table 6.9). Public hospital schools, in comparison, have close to equal proportions of males and females in instructional and administrative categories. Among instructional and administrative staff in private schools, females are strongly in the majority in cosmetology/barber, hospital, and allied health schools. Females occupy a majority of the clerical/nonprofessional positions in both public and private noncollegiate postsecondary schools, except for private flight schools. Only 43.1 percent of the clerical/nonprofessional positions in flight schools are held by females.

The predominance of males in supervisory positions is even more apparent in State level staff, where males hold an overwhelming majority of most senior positions (chart 6.5 and table 6.10). While females dominate directorships in the Health (84.2 percent) and Home Economics (100.0 percent) program areas, males hold over 90 percent of the directorships in the areas of Agriculture, Distribution, Technical, and Trade and Industrial. The balance between male and female incumbents is almost even in the Office Occupations program area. Other State level directorships exhibit extreme imbalance, with Sex Equity Coordinators being 98.0 percent female, while State Directors of Vocational Education and Executive Directors of the State Advisory Councils are 98.0 and 94.0 percent male, respectively.

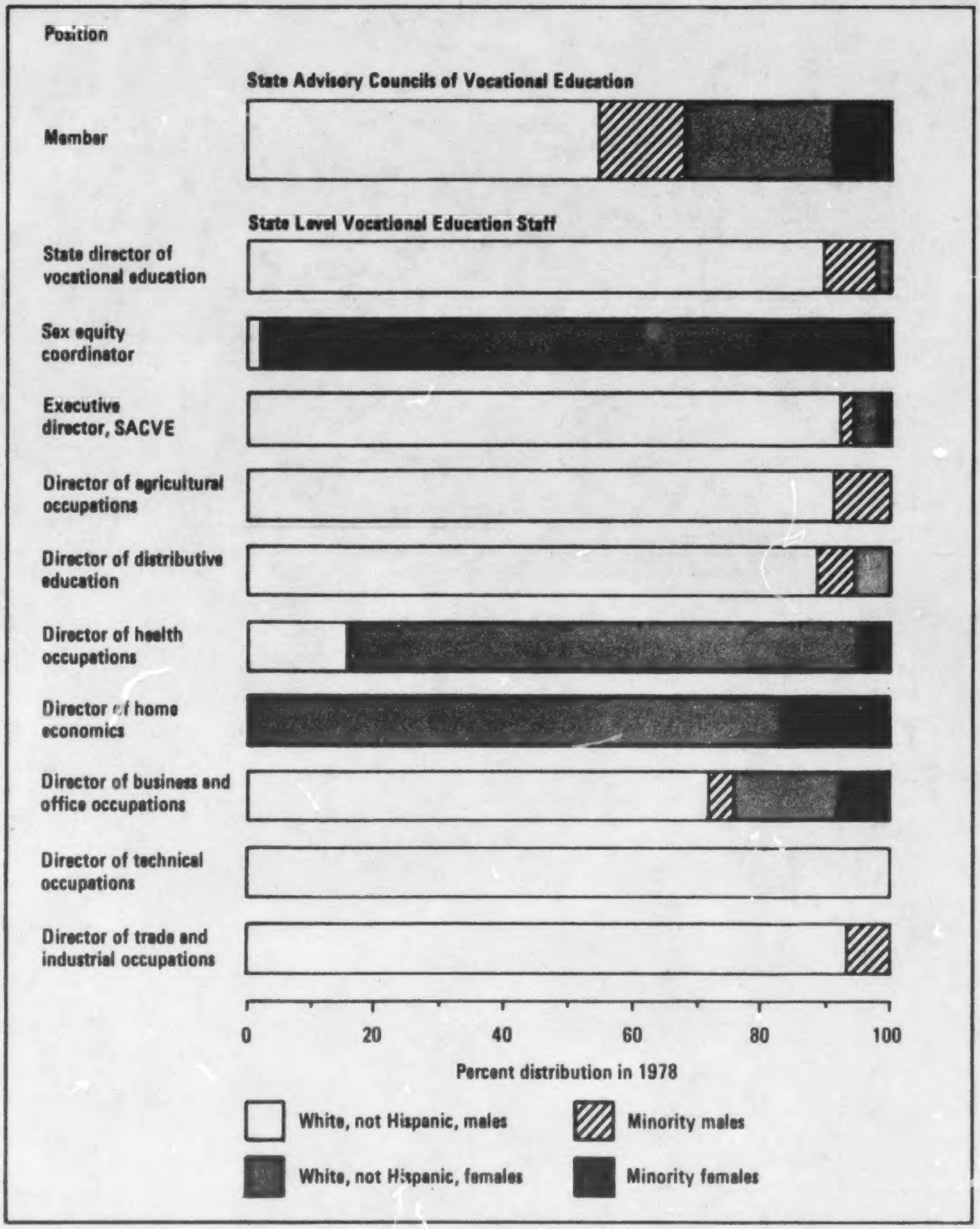
The composition of State Advisory Councils on Vocational Education is more heterogeneous than that of any of the positions cited here. Females comprise 31.3 percent of all council members. Minorities (male and female) make up 22.5 percent of the total.

Chart 6.4
Female Full-time Instructional Staff by Program Area in Institutions Offering Five or More Vocational Education Programs



SOURCE: Tables 6.5 to 6.8

Chart 6.5
Sex and Racial/Ethnic Distributions of Persons Holding Key State Level Vocational Education Positions



SOURCE: Table 6.10

Table 6.1
Teachers of vocational education (VEA), by level: Fiscal years 1972-1978

Level	1972	1973	1974	1975	1976	1977	1978
				Headcount			
Total (unduplicated)	235,658	243,514	266,220	294,053	309,931	335,301	354,175
Secondary[1]							
Total	131,404	133,620	150,860	164,664	164,050	173,218	183,507
Percent	51.5	50.3	51.1	51.0	50.0	48.8	47.2
Postsecondary[1]							
Total	56,311	58,298	66,776	72,377	76,919	85,564	80,443
Percent	22.1	21.9	22.6	22.4	23.4	24.1	20.7
Adult							
Total	67,242	73,900	77,579	86,132	87,436	95,974	124,586
Percent	26.4	27.8	26.3	26.6	26.6	27.1	32.1
				Full-time equivalent			
Total	175,882	181,694	203,789	222,158	225,469	243,637	264,729
Secondary							
Total	110,796	112,664	127,201	138,840	138,322	146,052	154,728
Percent	63.0	62.0	62.4	62.5	61.3	59.9	58.4
Postsecondary							
Total	39,241	40,626	46,534	50,437	53,602	59,626	56,058
Percent	22.3	22.4	22.8	22.7	23.8	24.5	21.2
Adult[2]							
Total	25,845	28,404	30,054	32,881	33,545	37,959	53,943
Percent	14.7	15.6	14.8	14.8	14.9	15.6	20.4

[1] Headcounts for secondary and postsecondary levels after 1972 are NCES estimates derived by holding the ratio of headcount to F.T.E. constant. If, in fact, the mix between full-time and part-time staff is changing at either level, these figures will be correspondingly in error.

[2] Adult F.T.E. figures are NCES estimates derived by attributing one-third F.T.E. to a part-time instructor.

NOTE: Headcount totals contain some duplication among levels.

SOURCE: U.S. Department of Health, Education, and Welfare, U.S. Office of Education, Division of Vocational and Technical Education, Annual Reports, 1972-1978.

TABLE 6.2 -- TEACHERS AND STAFF (FULL-TIME EQUIVALENTS), BY PROGRAM AREA AND BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	TOTAL	AGRI-CULTURE	DISTRI-BUTION	HEALTH	CONS. & HMMKG	OCCUP. HOME ECON	IND. ARTS	OFFICE OCCUP.	TECH-NICAL	TRADE & INDUS	OTHER NEC	SPECIAL NEC
ALABAMA	4534.4	449.3	159.2	405.1	559.3	170.0	34.0	676.1	144.3	1931.7	45.1	0.0
ALASKA	580.2	9.3	28.9	33.6	52.0	41.6	76.0	169.4	24.9	197.8	14.7	0.0
ARIZONA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARKANSAS	2307.1	263.5	60.2	319.5	393.3	35.6	43.9	307.1	0.0	684.3	199.7	0.0
CALIFORNIA	19232.6	944.5	1166.5	1984.5	1973.1	589.1	1461.[illegible]	5116.2	1145.6	4851.4	0.0	0.0
COLORADO	3103.1	192.2	220.3	286.0	335.8	141.0	0.0	883.8	394.6	761.5	0.0	0.0
CONNECTICUT	4401.5	62.0	167.0	131.0	752.0	35.0	1323.0	1128.0	11.5	684.0	108.0	0.0
DELAWARE	1052.9	50.1	33.6	47.0	98.0	43.0	139.0	189.3	37.6	296.3	119.0	0.0
DISTRICT OF COLUMBIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FLORIDA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GEORGIA	12804.9	276.7	880.3	1224.9	1583.2	631.8	445.3	2873.1	642.1	4239.6	0.0	0.0
HAWAII	[illegible]4.6	35.6	32.9	39.7	0.0	8.4	0.0	147.4	20.3	260.3	0.0	0.0
IDAHO	100[illegible].7	109.6	28.7	79.8	146.8	14.1	10.3	138.8	36.0	384.7	52.9	0.0
ILLINOIS	13333.[illegible]	663.4	964.4	1161.1	495.5	1180.6	0.0	3529.1	692.5	4186.6	852.3	0.0
INDIANA	3587.2	361.7	149.1	279.7	667.0	106.4	0.0	835.7	144.9	1205.9	236.8	0.0
IOWA	2189.9	385.5	127.0	349.1	344.1	64.8	0.2	283.8	118.2	515.1	22.1	0.0
KANSAS	1427.6	219.9	60.8	152.5	283.4	20.8	57.8	136.9	15.6	446.1	33.8	0.0
KENTUCKY	3919.2	311.4	153.4	436.5	555.9	72.9	79.6	752.1	55.1	1212.2	290.3	0.0
LOUISIANA	4502.6	362.6	119.9	402.1	513.5	87.8	312.7	1316.2	99.1	1329.6	39.0	0.0
MAINE	1623.5	46.0	48.0	220.5	144.0	41.0	0.0	255.6	88.0	696.0	89.0	0.0
MARYLAND	3578.6	99.6	110.6	255.1	693.4	53.6	0.0	980.3	158.6	755.5	471.9	0.0
MASSACHUSETTS	6936.0	156.0	219.0	538.0	493.0	121.0	796.0	1817.0	290.0	2506.0	0.0	0.0
MICHIGAN	5677.4	177.3	266.5	810.5	940.9	229.9	0.0	900.7	572.3	1682.5	496.7	0.0
MINNESOTA	5562.3	532.8	475.6	744.5	38.0	484.7	0.0	501.[illegible]	692.3	2093.2	0.0	0.0
MISSISSIPPI	3545.9	325.9	134.1	265.8	536.9	87.3	261.9	278.4	163.3	1330.1	0.0	102.2
MISSOURI	3136.0	380.0	297.0	370.0	586.0	92.0	0.0	408.0	0.0	1003.0	0.0	0.0
NEBRASKA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEVADA	721.7	34.4	27.5	35.1	75.3	10.5	13.5	194.2	50.5	204.7	75.9	0.0
NEW HAMPSHIRE	1022.5	52.8	19.5	60.[illegible]	117.4	22.7	229.4	214.5	0.0	184.7	43.1	0.0
NEW JERSEY	7518.5	52.3	167.3	159.6	1457.4	41.0	2274.6	2183.9	90.0	1092.3	0.0	0.0
NEW MEXICO	805.1	76.4	42.7	24.0	249.5	26.8	78.0	90.8	13.5	155.4	7.6	0.0
NEW YORK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTH CAROLINA	5067.0	429.0	295.0	143.0	758.0	134.0	138.0	614.0	0.0	1402.0	1054.0	0.0
NORTH DAKOTA	675.6	156.5	38.9	56.0	130.2	17.9	61.5	107.0	62.0	190.0	55.6	0.0
OHIO	11899.0	724.8	766.3	696.6	1285.7	425.1	0.0	1422.7	1[illegible]0.5	3148.0	404.0	2925.3
OKLAHOMA	3646.0	513.0	94.0	307.0	395.0	80.0	0.0	944.0	396.0	667.0	167.0	0.0
OREGON	2433.0	121.0	41.0	21.0	620.0	26.0	735.0	412.0	13.0	377.0	67.0	0.0
PENNSYLVANIA	7730.9	365.5	261.9	753.4	757.0	256.1	36.7	2205.7	796.9	2297.8	0.0	0.0
RHODE ISLAND	966.0	7.0	18.0	62.0	142.0	25.0	296.0	183.0	47.0	196.0	80.0	0.0
SOUTH CAROLINA	3850.8	179.5	113.1	146.7	357.7	57.4	63.6	709.5	130.6	908.6	1184.1	0.0
SOUTH DAKOTA	347.2	71.9	28.6	6.0	149.8	7.4	0.0	26.0	0.0	56.6	0.0	0.0
TENNESSEE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TEXAS	13574.0	1631.7	699.0	1134.9	2024.5	773.5	264.0	1706.3	597.6	4062.8	279.7	0.0
UTAH	4557.9	145.3	247.8	135.1	1661.0	140.3	309.1	551.2	55.8	1126.1	186.4	0.0
VERMONT	414.9	45.3	9.4	13.7	119.7	18.8	0.0	67.9	0.0	140.2	0.0	0.0
VIRGINIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WASHINGTON	4281.9	325.4	287.8	385.0	515.4	300.9	42.4	918.8	227.8	1216.1	62.4	0.0
WEST VIRGINIA	1711.9	111.3	59.3	97.8	224.4	57.0	0.0	503.0	36.9	505.0	117.2	0.0
WISCONSIN	1734.8	64.8	160.1	277.6	153.0	16.4	0.0	524.3	359.6	179.0	0.0	0.0
WYOMING	511.8	34.4	19.6	4.4	99.8	1.0	135.8	138.0	1.0	56.4	21.4	0.0
TOTAL U.S.	182411.2	11507.1	8852.0	15145.0	23588.0	6751.3	9580.7	36620.6	8505.3	51417.1	7336.6	3107.5
AMERICAN SAMOA	41.6	0.[illegible]	1.0	4.0	6.0	0.0	5.5	12.0	1.3	11.3	0.0	0.0
NORTHERN MARIANAS	17.6	3.1	0.0	0.0	5.3	0.0	0.0	1.2	0.0	8.0	0.0	0.0
GUAM	81.2	1.0	2.0	0.0	16.5	0.0	16.3	13.7	6.7	20.0	5.0	0.0
PUERTO RICO	2585.5	119.8	79.0	77.5	681.0	25.5	545.0	375.5	94.0	589.0	0.0	0.0
TRUST TERRITORY	117.3	16.8	0.0	1.0	24.8	1.7	0.0	10.1	0.0	62.9	0.0	0.0
OUTLYING AREAS	2843.2	140.4	82.0	82.5	733.6	27.2	566.8	412.5	102.0	691.2	5.0	0.0
U.S. & OUTLYING AREAS	185254.4	11647.4	8934.0	15227.5	24321.6	6778.5	10147.5	37033.2	8607.3	52108.4	341.6	3107.5

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 6.3 -- TEACHERS AND STAFF (UNDUPLICATED), BY PROGRAM AREA AND BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	TOTAL	AGRI- CULTURE	DISTRI- BUTION	HEALTH	CONS. & HMMKG	OCCUP. HOME ECON	IND. ARTS	OFFICE OCCUP.	TECH- NICAL	TRADE & INDUS	OTHER NEC	PROG/ SUPPORT	PROG/ SUPER- VISORY	SPECIAL NEC
ALABAMA	4,209	450	164	360	559	134	34	715	100	1,563	56	34	46	0
ALASKA	1,098	18	57	58	90	59	42	290	34	325	24	34	47	0
ARIZONA	5,119	203	403	352	458	266	159	921	272	1,550	321	8	0	0
ARKANSAS	2,540	292	70	355	462	39	42	327	0	620	187	76	70	0
CALIFORNIA	41,319	1,401	3,396	3,024	3,300	1,269	2,027	9,313	2,660	9,086	0	2,843	2,920	0
COLORADO	6,610	146	356	384	360	222	0	1,117	558	1,023	0	280	144	0
CONNECTICUT	4,798	62	107	140	766	35	1,323	1,108	12	738	168	154	105	0
DELAWARE	1,281	54	34	49	96	43	139	201	43	322	127	131	40	0
DISTRICT OF COLUMBIA	616	2	19	21	124	9	71	235	0	110	0	12	13	0
FLORIDA	19,612	754	1,500	1,067	976	1,431	1,456	4,205	1,300	3,808	1,491	651	373	0
GEORGIA	9,101	318	431	606	1,171	313	518	1,926	277	2,323	0	727	499	0
HAWAII	1,451	32	49	34	157	16	187	260	35	483	0	160	38	0
IDAHO	1,271	117	66	71	182	17	40	252	22	362	64	51	27	0
ILLINOIS	22,506	956	1,483	1,680	640	1,617	0	5,368	1,176	5,437	1,111	1,603	1,515	0
INDIANA	6,418	311	180	512	690	71	0	572	220	1,205	281	178	198	0
IOWA	3,064	470	210	436	417	84	1	332	184	672	30	212	16	0
KANSAS	1,824	234	72	193	339	26	72	175	22	491	38	93	69	0
KENTUCKY	5,095	319	196	316	711	134	91	819	31	929	997	344	206	0
LOUISIANA	4,374	322	122	251	603	77	353	1,292	52	875	36	171	220	0
MAINE	2,312	48	92	342	148	46	0	368	114	984	89	76	85	0
MARYLAND	6,751	149	339	485	1,140	60	0	2,153	503	1,311	494	117	0	0
MASSACHUSETTS	10,437	184	274	660	574	149	873	2,141	409	3,074	0	964	1,135	0
MICHIGAN	10,698	245	577	1,136	926	295	0	1,890	1,091	2,514	610	975	439	0
MINNESOTA	10,481	854	748	849	1,048	602	0	1,428	544	3,840	0	117	451	0
MISSISSIPPI	4,192	321	190	243	567	106	275	439	129	1,254	3	349	135	181
MISSOURI	7,010	406	506	633	837	192	0	1,050	0	1,059	0	1,327	200	0
NEBRASKA	1,510	194	104	118	264	31	0	305	0	419	34	26	15	0
NEVADA	1,203	58	85	56	85	23	21	316	110	326	102	6	15	0
NEW HAMPSHIRE	1,132	60	23	73	148	25	200	198	0	199	56	92	58	0
NEW JERSEY	7,863	53	168	163	1,501	41	2,284	2,212	90	1,097	0	0	254	0
NEW MEXICO	1,177	89	58	33	299	30	78	207	42	247	20	85	36	0
NEW YORK	27,831	623	1,235	1,994	2,457	848	4,295	8,310	1,592	4,985	0	367	917	0
NORTH CAROLINA	8,795	594	447	605	759	332	160	743	249	2,516	2,125	162	103	0
NORTH DAKOTA	1,137	163	56	63	230	26	63	187	62	190	64	17	16	0
OHIO	29,252	967	1,753	1,411	2,207	687	0	2,344	279	4,997	404	544	827	12,812
OKLAHOMA	4,895	534	98	477	395	89	0	1,223	539	705	167	288	381	0
OREGON	6,606	278	417	501	753	140	860	1,037	210	1,505	366	292	247	0
PENNSYLVANIA	15,326	615	463	1,075	1,365	296	50	4,262	2,548	4,058	0	687	907	0
RHODE ISLAND	1,383	12	24	64	157	25	317	230	97	251	135	45	26	0
SOUTH CAROLINA	5,122	200	153	192	448	62	108	889	187	1,051	1,631	123	78	0
SOUTH DAKOTA	734	103	40	65	181	32	0	73	0	207	0	13	20	0
TENNESSEE	7,416	270	324	455	638	213	378	1,102	422	2,294	192	761	387	0
TEXAS	18,848	1,681	696	1,743	2,440	702	298	2,999	1,046	5,607	718	482	346	0
UTAH	2,777	118	197	171	353	83	106	573	32	954	46	104	46	0
VERMONT	634	49	11	14	140	[illegible]	0	130	0	183	0	48	35	0
VIRGINIA	9,269	440	410	655	900	206	1,100	2,904	0	[illegible]	0	40	81	0
WASHINGTON	11,124	492	877	909	1,059	1,219	130	1,926	639	3,179	89	364	241	0
WEST VIRGINIA	2,052	114	60	102	257	57	0	531	38	585	167	117	104	0
WISCONSIN	11,782	552	612	719	1,821	379	1,160	2,553	59	2,264	91	197	875	0
WYOMING	562	37	20	6	109	1	149	150	1	81	20	0	0	0
TOTAL U.S.	368,897	17,056	20,132	26,721	36,309	12,967	19,440	74,493	17,550	87,015	12,570	16,709	14,942	12,993
AMERICAN SAMOA	44	8	1	4	6	0	5	12	1	11	0	0	4	
NORTHERN MARIANAS	23	4	0	0	[illegible]	0	0	2	0	10	0	0	1	0
GUAM	127	1	2	0	[illegible]	0	18	20	10	33	5	11	9	0
PUERTO RICO	2,648	119	79	77	[illegible]	25	545	375	94	589	0	40	16	0
TRUST TERRITORY	144	21	0	1	50	2	0	10	0	72	0	1	7	0
OUTLYING AREAS	2,978	145	82	82	741	27	568	419	105	715	5	52	37	0
U.S. & OUTLYING AREAS	371,875	17,201	20,214	26,803	37,050	12,994	20,008	74,912	17,655	87,730	12,575	16,761	14,979	12,993

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

Table 6.4
Distribution of full-time vocational staff in institutions with five or more vocational programs, by sex and racial/ethnic group: Fall 1979

Type of staff	Total	Sex		Racial/ethnic group				
		Male	Female	Am. Ind./ Alask. Nat.	Asian Am./ Pac. Isl.	Black, not Hispanic	Hispanic	White, not Hispanic
	Percentage distribution							
All staff	100.0	60.6	39.4	0.3	0.8	8.3	1.8	88.8
Instructional	100.0	60.2	39.8	0.3	0.8	8.1	1.6	89.2
Agriculture	100.0	94.8	5.2	0.4	0.6	6.2	0.9	92.0
Distribution	100.0	72.6	27.4	0.3	0.5	4.0	1.4	93.8
Health	100.0	16.6	83.4	0.3	0.9	6.0	1.2	91.6
Occ. home economics	100.0	10.1	89.9	0.2	0.7	12.3	1.4	85.4
Office occupations	100.0	37.4	62.6	0.3	1.1	10.3	1.4	87.0
Technical	100.0	90.8	9.2	0.3	1.1	2.8	1.5	94.3
Trade and industrial	100.0	91.3	8.7	0.4	0.6	7.0	2.1	89.9
Consumer and homemaking	100.0	2.0	98.0	0.2	0.9	13.4	1.4	84.0
Industrial arts	100.0	96.3	3.7	0.3	0.5	10.1	1.8	87.3
Program/support	100.0	51.9	48.1	0.6	1.1	11.0	3.6	83.6
Program/supervisory	100.0	80.8	19.2	0.4	0.6	6.7	1.4	90.9

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 6.5
Distribution of full-time vocational staff in comprehensive and vocational high schools, by sex and racial/ethnic group: Fall 1979

Type of staff	Total	Sex		Racial/ethnic group				
		Male	Female	Am. Ind./ Alask. Nat.	Asian Am./ Pac. Isl.	Black, not Hispanic	Hispanic	White, not Hispanic
	Percentage distribution							
All staff	100.0	54.7	45.3	0.3	0.7	11.4	1.7	85.9
Instructional	100.0	53.5	46.5	0.3	0.7	11.3	1.7	86.0
Agriculture	100.0	95.4	4.6	0.4	0.6	8.2	1.1	89.7
Distribution	100.0	70.1	29.9	0.2	0.4	6.5	1.4	91.5
Health	100.0	10.8	89.2	0.1	0.3	9.7	1.5	88.4
Occ. home economics	100.0	6.4	93.6	0.3	0.7	15.2	1.4	82.4
Office occupations	100.0	27.3	72.7	0.3	1.0	13.1	1.4	84.2
Technical	100.0	87.6	12.4	0.4	2.0	5.1	2.0	90.5
Trade and industrial	100.0	91.0	9.0	0.3	0.6	10.0	2.4	86.7
Consumer and homemaking	100.0	3.1	96.9	0.2	0.9	14.0	1.4	83.5
Industrial arts	100.0	97.1	2.9	0.3	0.5	10.3	1.8	87.1
Program/support	100.0	54.5	45.5	0.3	0.4	12.4	2.3	84.6
Program/supervisory	100.0	80.7	19.3	0.3	0.1	9.5	1.5	88.6

NOTE: Numbers are based on full-time staff at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 6.6
Distribution of full-time vocational staff in area vocational centers (secondary), by sex and racial/ethnic group: Fall 1979

Type of staff	Total	Sex		Racial/ethnic group				
		Male	Female	Am. Ind./ Alask. Nat.	Asian Am./ Pac. Isl.	Black, not Hispanic	Hispanic	White, not Hispanic
	Percentage distribution							
All staff	100.0	66.7	33.3	0.3	0.3	5.7	1.0	92.7
Instructional	100.0	67.2	32.8	0.3	0.2	5.4	0.9	93.2
Agriculture	100.0	89.1	10.9	0.2	0.4	3.1	0.3	96.0
Distribution	100.0	59.3	40.7	0.6	0.1	1.9	1.0	96.4
Health	100.0	3.9	96.1	0.4	0.5	5.7	0.5	92.9
Occ. home economics	100.0	17.1	82.9	0.1	0.1	7.8	0.6	91.4
Office occupations	100.0	27.4	72.6	0.5	0.3	8.6	1.4	89.2
Technical	100.0	88.5	11.5	0.1	0.2	2.6	1.4	95.7
Trade and industrial	100.0	89.7	10.3	0.3	0.2	4.9	0.9	93.7
Consumer and homemaking	100.0	14.2	85.8	0.0	0.6	9.5	0.6	89.2
Industrial arts	100.0	86.9	13.1	0.0	0.0	5.8	0.0	94.2
Program/support	100.0	51.9	48.1	0.5	0.5	8.4	1.7	88.9
Program/supervisory	100.0	87.7	12.3	0.4	0.3	4.7	0.9	93.7

NOTE: Numbers are based on full-time staff at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 6.7
Distribution of full-time vocational staff in area vocational schools (postsecondary), by sex and racial/ethnic group: Fall 1979

Type of staff	Total	Sex		Racial/ethnic group				
		Male	Female	Am. Ind./ Alask. Nat.	Asian Am./ Pac. Isl	Black, not Hispanic	Hispanic	White, not Hispanic
	Percentage distribution							
All staff	100.0	68.2	31.8	0.5	0.3	6.8	0.9	91.5
Instructional	100.0	68.1	31.9	0.4	0.3	5.9	0.6	92.8
Agriculture	100.0	92.3	7.7	1.2	0.4	0.0	0.0	98.4
Distribution	100.0	65.2	34.8	0.0	1.1	1.4	1.3	96.2
Health	100.0	8.7	91.3	0.1	0.3	5.8	0.1	93.7
Occ. home economics	100.0	27.7	72.3	0.0	1.2	13.3	2.4	83.1
Office occupations	100.0	35.7	64.3	0.1	0.1	7.1	0.4	92.3
Technical	100.0	96.8	3.2	0.2	0.4	1.9	0.5	97.0
Trade and industrial	100.0	92.0	8.0	0.7	0.1	7.2	0.8	91.2
Consumer and homemaking	100.0	3.2	96.8	0.0	0.0	16.1	0.0	83.9
Industrial arts	100.0	81.8	18.2	0.0	0.0	18.2	0.0	81.8
Program/support	100.0	57.2	42.8	1.5	0.8	12.4	2.7	82.6
Program/supervisory	100.0	83.8	16.2	0.2	0.2	7.0	0.5	92.1

NOTE: Numbers are based on full-time staff at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 6.8
Distribution of full-time vocational staff in 2-year institutions of higher education, by sex and racial/ethnic group: Fall 1979

Type of staff	Total	Sex		Racial/ethnic group				
		Male	Female	Am. Ind./ Alask. Nat.	Asian Am./ Pac. Isl.	Black, not Hispanic	Hispanic	White, not Hispanic
	Percentage distribution							
All staff	100.0	62.2	37.8	0.4	1.3	4.8	2.3	91.2
Instructional	100.0	63.1	36.9	0.4	1.2	4.1	1.8	92.5
Agriculture	100.0	90.7	9.3	0.4	0.6	0.7	1.0	97.3
Distribution	100.0	78.2	21.8	0.3	0.8	1.6	1.3	96.0
Health	100.0	19.9	80.1	0.3	1.2	5.2	1.4	91.9
Occ. home economics	100.0	17.4	72.6	0.2	1.0	6.0	1.9	90.9
Office occupations	100.0	54.1	45.9	0.4	1.4	5.5	1.4	91.3
Technical	100.0	90.6	9.4	0.4	1.2	2.6	1.5	94.3
Trade and industrial	100.0	91.1	8.9	0.5	1.2	3.6	2.9	91.8
Consumer and homemaking	100.0	16.5	83.5	0.4	1.4	6.3	2.3	89.6
Industrial arts	100.0	79.0	21.0	0.0	1.8	8.7	2.7	86.8
Program/support	100.0	47.4	52.6	0.8	2.5	10.6	6.8	79.3
Program/supervisory	100.0	72.3	27.7	0.6	1.2	4.8	1.[illegible]	91.7

NOTE: Numbers are based on full-time staff at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

Table 6.9
Distribution of staff in noncollegiate postsecondary schools with occupational programs, by sex, staff function, and by type and control of school: 1978

Type and control of school	Total staff		Instructional		Administrative/ managerial		Clerical/ nonprofessional	
	Male	Female	Male	Female	Male	Female	Male	Female
				Percentage distribution				
				Public				
Total	54.0	46.0	58.2	41.8	69.2	30.8	20.6	79.4
Vocational/technical	56.3	43.7	61.6	38.4	72.7	27.3	20.7	79.3
Technical institute	78.6	21.4	95.6	4.4	89.5	10.5	19.7	80.3
Trade	76.1	23.9	100.0	(*)	76.9	23.1	43.7	56.3
Hospital	44.9	55.1	48.6	51.4	52.3	47.7	12.8	87.2
Allied health	6.8	93.2	4.5	95.5	28.8	71.2	1.4	98.6
				Private				
Total	43.8	56.2	46.5	53.5	48.2	51.8	17.8	72.2
Vocational/technical	63.8	36.2	59.2	40.8	61.9	38.1	21.3	78.7
Technical institute	77.3	22.7	96.0	4.0	74.3	25.7	30.9	69.1
Business/office	42.2	57.8	46.9	53.1	48.0	52.0	10.3	89.7
Cosmetology/barber	21.1	78.9	20.0	80.0	34.0	66.0	14.0	86.0
Flight	77.1	22.9	93.0	7.0	67.8	32.2	56.9	43.1
Trade	68.5	31.5	83.8	16.2	65.5	34.5	26.6	73.4
Arts/design	55.8	44.2	65.1	34.9	46.4	53.6	22.1	77.9
Hospital	14.3	85.7	15.7	84.3	20.4	79.6	1.9	98.1
Allied health	29.4	70.6	31.9	68.1	36.2	63.8	15.4	84.6
Other	24.6	75.4	25.7	74.3	19.0	81.0	25.1	74.9

(*) Less than 0.05 percent.

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Enrollments and Programs in Noncollegiate Postsecondary Schools, 1978, 1979.

Table 6.10
Distribution of members of State Advisory Councils on Vocational Education (SACVE) and State-level vocational education staff, by racial/ethnic group and sex: 1978

Position	Sex		Racial/ethnic group									
			Am. Ind./ Alask Nat.		Asian Am./ Pac. Isl.		Black, not Hispanic		Hispanic		White, not Hispanic	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Members of State advisory councils of vocational education (SACVE)	949	432	14	14	13	9	133	86	32	11	757	312
Percent	68.6	31.3	1.0	1.0	0.9	0.7	9.6	6.2	2.3	0.8	54.8	22.6
State director	49	1	0	0	1	0	3	0	0	0	45	1
Percent	98.0	2.0	0.0	0.0	2.0	0.0	6.0	0.0	0.0	0.0	90.0	2.0
Sex equity coordinator	1	49	0	0	0	0	0	10	0	0	1	39
Percent	2.0	98.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	2.0	78.0
Executive director, SACVE	47	3	0	0	1	0	0	1	0	0	46	2
Percent	94.0	6.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	92.0	4.0
Director of Agricultural occupations	22	0	0	0	1	0	1	0	0	0	20	0
Percent	100.0	0.0	0.0	0.0	4.5	0.0	4.5	0.0	0.0	0.0	90.9	0.0
Director of distributive education	17	1	0	0	1	0	0	0	0	0	16	1
Percent	94.4	5.6	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	88.9	5.6
Director of health occupations	3	18	0	0	0	0	0	1	0	0	3	15
Percent	15.8	84.2	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	15.8	78.9
Director of home economics	0	24	0	0	0	1	0	3	0	0	0	20
Percent	0.0	100.0	0.0	0.0	0.0	4.2	0.0	12.5	0.0	0.0	0.0	83.3
Director of business and office occupations	19	6	0	0	0	0	0	2	1	0	18	4
Percent	76.0	24.0	0.0	0.0	0.0	0.0	0.0	8.0	4.0	0.0	72.0	16.0
Director of technical occupations	9	0	0	0	0	0	0	0	0	0	9	0
Percent	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Director of trade and industrial occupations	30	0	0	0	1	0	0	0	1	0	28	0
Percent	100.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	3.3	0.0	93.3	0.0

SOURCE: Laurie R. Harrison, et. al. Primary Data of the Vocational Education Equity Study, American Institutes for Research, for U.S. Department of Health, Education, and Welfare, U.S. Office of Education, April 1979.

Chapter 7

Allocations and Expenditures for Vocational Education

The increasing demand for vocational education is reflected in the steady rise in total expenditures as well as enrollments in vocational education programs. Since fiscal year 1972, total expenditures on programs covered by the Vocational Education Act (VEA) have risen from $2.661 billion to $6.657 billion in fiscal year 1979 (chart 7.1 and table 7.1). The growth in Federal expenditures has been surpassed by the growth in State and local expenditures. Federal expenditures rose about 41 percent from 1972 to 1979. In contrast, State and local expenditures rose about 173 percent.

The Federal share of total expenditures, which decreased steadily between 1972 and 1978, increased slightly in 1979. Federal expenditures constituted 17.5 percent of the total in 1972, while in 1978 they were just 8.8 percent of the total. In 1979, they rose to 9.9 percent of the total.

When the expenditure figures are converted to amounts expressed in constant 1978 dollars, the patterns of change in both total expenditures and Federal support are altered. The increases in total expenditures are modified, though still evident, with a constant dollar increase of over 51 percent between 1972 and 1979 (chart 7.2). This expenditure increase may be compared to an enrollment increase of 96.4 percent during the same period. Federal support, considered now in constant dollars, actually decreased as a share of the total. Federal expenditures provided 17.5 percent of the total in fiscal year 1972 and 9.9 percent in fiscal year 1979.

The Federal financial support of vocational education is made available to State Boards for Vocational Education under provisions of the Vocational Education Act, as amended. The Act provides for categorical funding according to five major legislative sections (105, 120, 130, 140, and 150). From allocations to the States under Sections 120 and 130, funds are set aside for National Priority Programs as specified under Section 110. These program funds are targeted for the handicapped, disadvantaged, limited-English-speaking, and for those presently being served in postsecondary and adult vocational education.

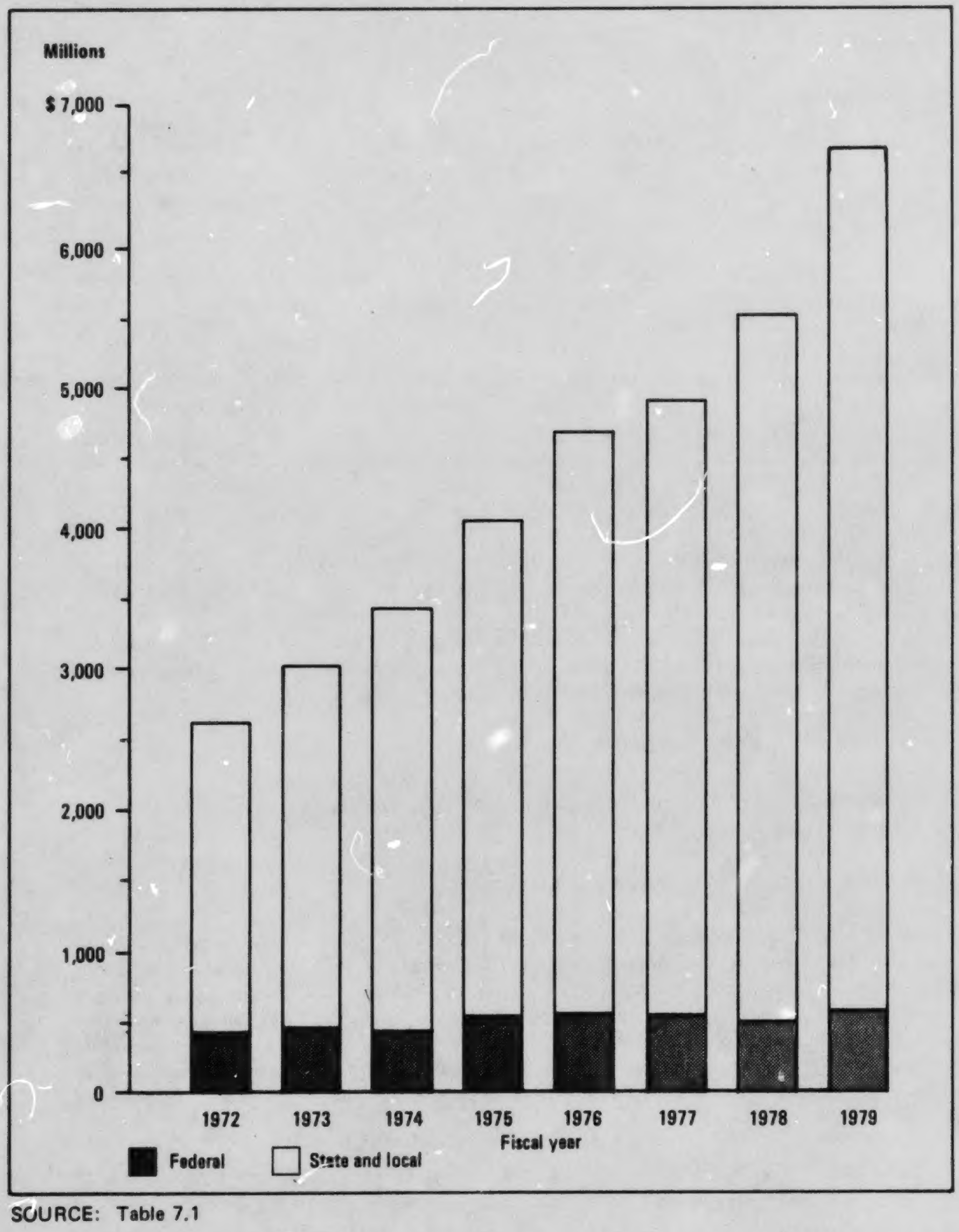
The five sections through which funds are provided are:

Section 105. State and Local Advisory Councils. This section provides for support of State Advisory Councils which receive an annual grant of not less than $75,000 nor more than $200,000 for carrying out the purposes specified under the Act. Expenditures under this section are **not** included in reported total expenditures for vocational education.

Section 120. Basic Grants. Basic grants to the States may be used for several purposes including: vocational education programs, work-study programs, cooperative vocational education programs, energy education, construction of area vocational facilities, support of full-time sex equity personnel necessary to assist the State Board, stipends to vocational education students, placement services, industrial arts programs, support services to women who enter instructional programs traditionally oriented toward preparation of males for employment, day care services, vocational education programs for displaced homemakers, construction of and operation of residential vocational schools, and State and local administration.

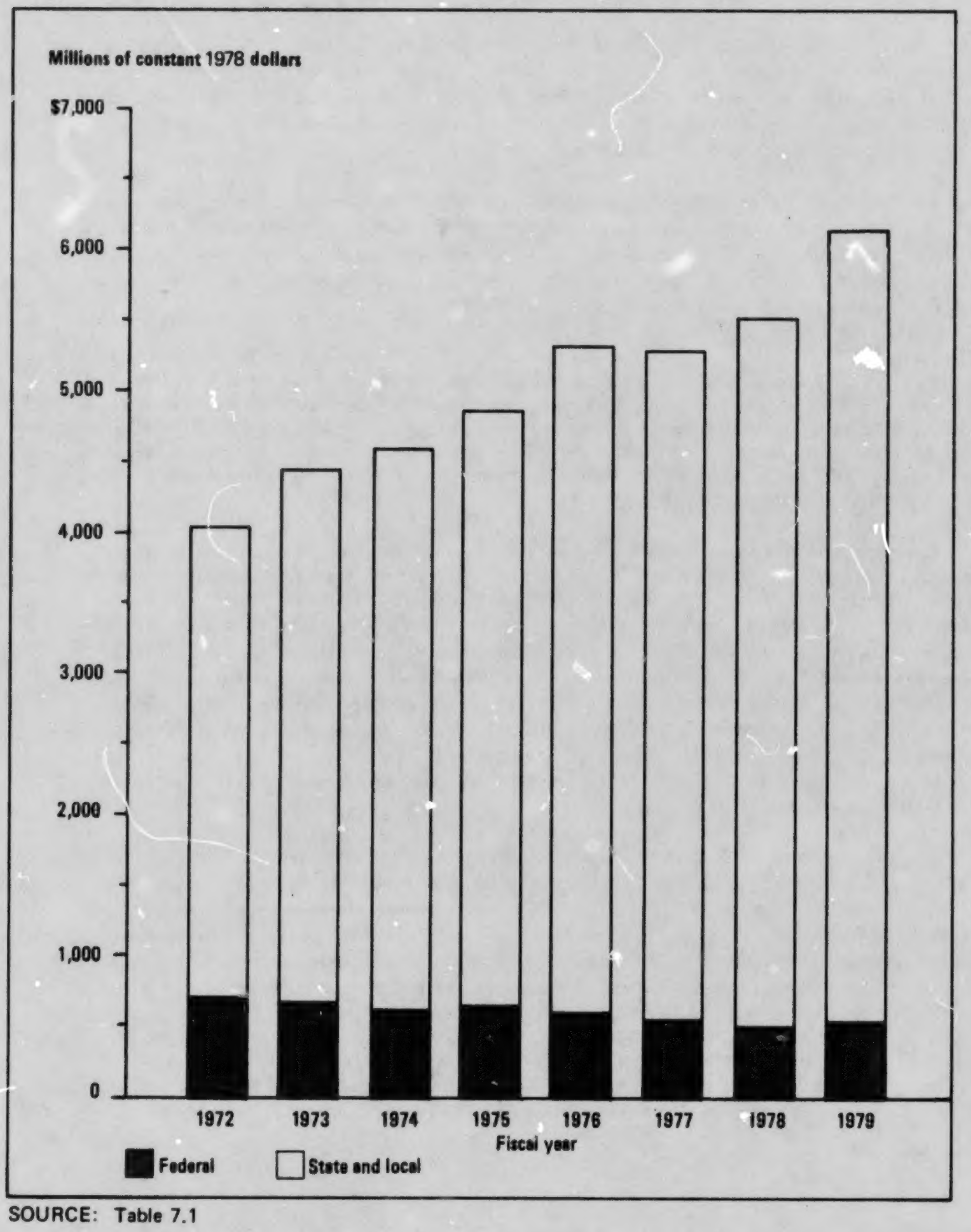
Section 130. Program Improvements and Supportive Services. Allocations for program improvements may be used for the following purposes: research programs, exemplary and innovative programs, curriculum development, guidance and counseling services, pre-service and in-service training for teachers, grants to overcome sex bias, as well as State and local administration.

Chart 7.1
Expenditures for Vocational Education, by Source of Funds



SOURCE: Table 7.1

Chart 7.2
Expenditures for Vocational Education, by Source of Funds



SOURCE: Table 7.1

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Section 140. Special Programs for the Disadvantaged. These funds are allocated for the purpose of assisting the States in conducting special programs for the disadvantaged. The funds are to be spent in areas with high concentrations of youth unemployment and school dropouts and may be used to pay the full cost of vocational education for disadvantaged persons.

Section 150. Consumer and Homemaking Education. These grants are made to the States to assist them in conducting consumer and homemaking education programs. In addition, at least one-third of the Federal funds under this Section are specifically to be used in economically depressed areas or areas with high rates of unemployment, for programs designed to assist consumers and to help improve home environments and the quality of family life.

During the period from 1970 to 1979, public expenditures for vocational education increased more rapidly than total public education expenditures. Reported expenditures for programs included in State plans for vocational education increased 262 percent ; in contrast total public expenditures rose 119 percent (table 7.2). While vocational expenditures almost doubled as a percent of total education expenditures during this period, vocational education expenditures are only 5.3 percent of the total.

Expenditures for vocational education under the Vocational Education Act totaled $6.657 billion in fiscal year 1979, a 17.4 percent increase over the fiscal year 1978 total of $5.674 billion (table 7.3). These total expenditures include the sum of Federal and non-Federal expenditures in four of the five legislative categories of the VEA (excluded are expenditures under Section 105, State Advisory Councils). Section 120 accounts for 87 percent of the total amount expended compared with 5 percent devoted to Section 130, one-half percent to Section 140, and 7 percent to Section 150. Total expenditures for all sections plus expenditures for State Advisory Councils are shown by State in table 7.4.

Several regulatory provisions in the VEA impose spending requirements on State and local governments. These requirements include the matching of at least a portion of Federal funds in some cases and the set-aside of portions of Federal funds for specific types of programs in other cases. However, actual State and local expenditures frequently exceed the minimal requirements of the regulations, so that yearly changes in Federal and combined State and local shares occur. The Federal proportion of total expenditures increased from fiscal year 1978 to fiscal year 1979 for all legislative categories. The largest of the percent increases was reported for Section 130 expenditures. The Federal share rose from 27.1 to 31.4 percent of the Section total, the result of a dollar increase from $64.6 million to $120.7 million (table 7.3). Expenditures for all sections combined, by State, including outlays and unliquidated obligations followed by expenditures for each of the legislative sections by State, are presented in table 7.5 through 7.9. Federal expenditures for fiscal year 1978 are shown by State in table 7.10

Total Federal allocations for all sections combined increased by 3.8 percent from $577 million to $599 million between fiscal year 1978 and fiscal year 1979 (table 7.11). Allocations for Basic Grants (Section 120) and Program Improvements and Supportive Services (Section 130) increased (over 4 percent growth for both), while allocations for Special Programs for the Disadvantaged (Section 140) and Consumer and Homemaking Education (Section 150) remained virtually unchanged. Allocations to the States from these appropriations are based on age distribution and per capita income. Allocations for each of the legislative sections are shown by State for fiscal year 1979 in table 7.12 and for fiscal year 1978 in table 7.13.

Expenditures of Federal funds during a given year may exceed Federal allocations for that year. For example, while total Federal allocations increased by 3.8 percent from fiscal year 1978 to fiscal year 1979, spending of Federal funds for that same time period increased 31.9 percent (table 7.11). This phenomenon is

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due to provisions in the legislation, which permit unobligated allocations and/or unliquidated obligations from one year to be carried foward to the next year. Comparisons of allocations with expenditures for the States, presented earlier, show that in 22 States, expenditures of Federal funds for fiscal year 1979 exceeded the Federal allocations for that year.

The differences between the year the funds were allocated and the year in which they were spent are increased by the method some States use in reporting unliquidated obligations. The period in which funds were reported as **expended** may not necessarily coincide with the period in which the funds were **used.** For example, funds committed in one year but not spent may not be reported as expenditures until the year in which the obligation is removed. In these cases the relation between program activities and funding is obscured. Therefore, specific comparisons should not be made between the reported allocations or expenditures for a given year and participation in particular programs.

The legislative and regulatory provisions mentioned earlier relate to programs for groups with special needs. Following are the vocational education program allocations set aside for the year 1978-79:

10 percent of Section 120 and 130 allocations are for the handicapped,
20 percent of Section 120 and 130 allocations are for the disadvantaged and for those of limited English proficiency,
15 percent of Section 120 and 130 allocations are for postsecondary and adult vocational education.

The regulations implementing these provisions for the school year 1978-79 allowed State and local matching funds used under Section 110(a) and 110(b) to pay "excess costs" of educating students in special needs populations. Because these regulations are different from those in effect in earlier years, no comparisons of either students served or authorizations and expenditures can be made between 1978-79 and earlier years. It is possible only to examine total outlays for 1978-79, which were allocated in fiscal years 1978 and 1979 (table 7.14). Outlays totaled $2.75 billion to provide programs for handicapped, disadvantaged, limited English proficiency, and adult and postsecondary students during 1978-79. The total outlays by State for each of the special population groups, from Federal and non-Federal sources, are presented in tables 7.15 through 7.18.

Considerable detail on outlays for 1978-79 is available for each of the five major legislative sections. These data, supplied through VEDS, are included here for reference. Outlays for Section 120 programs are summarized by source of funds and authorization year in table 7.19. Outlays by State for each of the Section 120 programs are shown, by source, in tables 7.20 through 7.33. Outlays for Section 130 programs are summarized in similar fashion in table 7.34, with program details by State in tables 7.35 through 7.43. Outlays for Section 140 programs are shown in tables 7.44 and 7.45 and for Section 150 programs in tables 7.46 through 7.50.

Table 7.1
Total expenditures for vocational education (VEA), by source of funds, in current and constant 1978 dollars: Fiscal years 1972-1979

Expenditures	Fiscal year 1972	1973	1974	1975	1976	1977	1978	1979
	Thousands of current dollars							
Total	$2,660,759	$3,033,658	$3,433,820	$4,037,277	$4,713,577	$4,962,555	$5,673,527	$6,657,208
Federal	466,030	482,391	468,197	536,140	543,211	533,611	499,106	658,120
State/local	2,194,729	2,551,267	2,965,623	3,501,137	4,170,366	4,428,945	5,174,421	5,999,090
	Thousands of constant 1978 dollars							
Total	$4,049,675	$4,438,242	$4,610,933	$4,881,875	$5,322,100	$5,296,039	$5,673,527	$6,149,929
Federal	709,298	705,738	628,695	648,300	613,340	569,469	499,106	607,971
State/local	3,340,377	3,732,504	3,982,238	4,233,575	4,708,760	4,726,570	5,174,421	5,541,959

NOTES: Excludes expenditures for State Advisory Councils.
Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Status of Vocational Education in 1978, 1979 and unpublished tabulations; U.S. Department of Education, National Center for Education Statistics, Vocational Education Data System.

Table 7.2
Total reported expenditures for public vocational education (VEA), compared to total estimated expenditures for all public education: Fiscal years 1970, 1976, 1978, 1979

Fiscal year	Total reported public expenditures vocational education*	Total public education expenditures** (estimated)	Vocational expenditures as percent of total education expenditures
		Thousands of dollars	
1970	$ 1,841,846	$ 56,800,000	3.24
1972	2,660,759	67,400,000	3.95
1976	4,713,577	100,200,000	4.70
1978	5,673,527	115,900,000	4.90
1979	6,657,208	124,400,000	5.35

*Reflects only expenditures for programs included in State plan for vocational education; excludes expenditures for State Advisory Councils.

**Expenditures include money received from grants and loans and exclude only the funds used for reducing debt. Institutional expenditures derived directly from the grants of Federal, State and local governments are included. Expenditures from a variety of private sources, such as tuition and fees, private gifts and grants, and endowment earnings, are included. Some governmental grants to individuals appear in institutional accounts as receipts from students for tuition, fees, and auxiliary services. These grants, as well as loans that must be repaid, are also included. Other grants and loans to individuals may be spent for board and room "off campus" and are not counted as institutional receipts from any source.

SOURCES: United States Department of Education, National Center for Education Statistics, Vocational Education Data System, preliminary data; United States Department of Health, Education, and Welfare, Division of Vocational and Technical Education, selected statistical tables.

Table 7.3
Total Federal and State/local expenditures on vocational education (VEA), by legislative section: Fiscal years 1978 and 1979

Expenditures	Total	Section			
		120	130	140	150
		Amount, in thousands of dollars			
Fiscal year 1979					
Total	$6,657,208	$5,754,555	$384,235	$33,189	$485,225
Federal	658,120	470,358	120,792	20,897	46,075
State/local	5,999,090	5,284,192	263,446	12,293	439,156
Federal as percent of total	9.9	8.2	31.4	63.0	9.5
Fiscal year 1978					
Total	$5,673,527	$4,977,391	$238,902	$28,335	$428,899
Federal	499,106	379,555	64,664	17,133	37,754
State/local	5,174,421	4,597,836	174,238	11,202	391,145
Federal as percent of total	8.8	7.6	27.1	60.5	8.8
		Percent change in expenditures from FY 1978 to FY 1979			
Total	17.4	15.6	60.8	17.1	13.1
Federal	31.9	23.9	86.8	22.0	22.0
State/local	15.9	14.9	51.2	9.7	12.3

NOTES: Excludes expenditures for State Advisory Councils provided by Sec. 105.
Details may not add to totals because of rounding .

SOURCE: U.S. Department of Education, National Center for Education Statistics, Vocational Education Data System; U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Report, 1978.

TABLE 7.- -- FEDERAL AND STATE/LOCAL (VEA) EXPENDITURES, BY LEGISLATIVE SECTION, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER AND UNLIQUIDATED OBLIGATIONS)

STATE OR OUTLYING AREA	TOTAL	BASIC GRANTS (SEC 120)	PROGRAM IMPROVEMENT (SEC 130)	DISADVANTAGED (SEC 140)	CONSUMER AND HOMEMAKING (SEC 150)	STATE ADVISORY COUNCILS (SEC 105)
ALABAMA	73,920,055	61,379,242	5,330,623	402,499	6,729,668	77,823
ALASKA	[illegible]4,131	12,234,831	329,035	69,247	427,426	93,592
ARIZONA	40,[illegible]35	33,440,557	2,062,499	189,761	4,874,317	55,291
ARKANSAS	38,[illegible]	28,371,635	4,805,142	155,637	4,955,497	74,279
CALIFORNIA	787,199,491	656,883,893	52,546,968	3,164,646	74,355,310	248,674
COLORADO	74,171,134	64,706,847	3,872,993	336,[illegible]	5,183,494	71,186
CONNECTICUT	67,357,661	57,922,221	2,429,668	453,419	6,468,164	84,189
DELAWARE	34,764,877	31,687,637	1,304,238	116,294	1,656,708	0
DISTRICT OF COLUMBIA	6,168,626	5,256,876	344,085	62,165	440,921	63,779
FLORIDA	412,055,451	367,570,588	17,723,479	5,863,972	20,810,699	80,713
GEORGIA	122,526,613	105,525,118	4,359,799	374,126	12,267,570	0
HAWAII	14,819,822	12,347,124	1,078,255	71,950	1,241,083	81,410
IDAHO	17,576,179	14,108,465	1,236,599	137,999	2,031,217	61,899
ILLINOIS	359,020,481	338,705,936	4,616,667	782,192	14,855,983	259,703
INDIANA	80,490,066	68,728,413	3,967,347	1,469,366	6,232,984	99,956
IOWA	70,137,132	62,762,337	1,847,429	343,387	5,108,979	75,000
KANSAS	42,736,823	35,314,718	2,318,970	218,852	4,812,948	39,335
KENTUCKY	79,075,872	66,982,121	2,692,471	333,535	8,998,139	69,606
LOUISIANA	68,823,673	48,829,183	10,322,385	1,920,380	7,650,337	161,388
MAINE	23,954,739	20,912,045	935,269	191,127	1,856,183	60,115
MARYLAND	118,645,261	95,952,467	3,516,706	504,826	16,557,009	114,253
MASSACHUSETTS	265,378,005	239,294,246	9,648,566	592,194	15,739,765	103,234
MICHIGAN	262,273,750	203,700,695	37,685,640	919,705	19,773,373	194,337
MINNESOTA	114,236,011	98,378,769	8,792,386	365,880	6,609,925	89,051
MISSISSIPPI	52,252,344	39,413,718	6,941,217	483,792	5,347,355	66,262
MISSOURI	91,585,269	62,092,994	20,329,009	659,655	8,412,693	90,918
MONTANA	73,922	0	0	0	0	73,922
NEBRASKA	25,685,364	21,028,477	1,677,486	130,720	2,772,045	76,636
NEVADA	13,531,860	12,001,612	275,644	95,511	1,079,869	79,224
NEW HAMPSHIRE	13,087,434	10,254,376	742,578	100,328	1,932,544	57,608
NEW JERSEY	178,696,688	165,328,567	6,263,997	1,128,904	5,877,565	97,655
NEW MEXICO	30,333,809	25,916,784	933,720	139,054	3,248,346	95,905
NEW YORK	588,412,760	567,159,158	7,656,320	606,641	12,832,046	158,595
NORTH CAROLINA	208,063,614	183,425,664	10,305,168	538,939	13,655,971	137,872
NORTH DAKOTA	16,663,533	13,885,594	841,486	82,960	1,864,494	68,999
OHIO	364,229,988	291,462,718	18,652,398	1,510,546	52,427,274	177,054
OKLAHOMA	90,466,836	79,293,220	5,218,803	269,474	5,621,196	64,143
OREGON	24,210,263	21,173,897	1,848,857	390,468	722,473	74,568
PENNSYLVANIA	303,594,893	279,636,683	18,352,676	1,437,415	4,088,583	79,536
RHODE ISLAND	28,760,597	24,501,234	1,360,248	168,662	2,645,913	56,540
SOUTH CAROLINA	136,193,381	123,546,021	6,668,879	382,543	5,495,686	100,252
SOUTH DAKOTA	10,085,192	7,881,470	613,565	12,075	2,233,858	64,224
TENNESSEE	116,142,780	92,004,615	4,933,689	463,908	18,631,688	109,080
TEXAS	335,179,978	262,017,737	37,870,064	947,958	34,131,485	212,734
UTAH	44,640,880	39,959,065	2,914,773	667,975	1,030,456	68,631
VERMONT	10,930,027	9,101,319	500,181	19,911	1,232,409	76,207
VIRGINIA	141,544,181	123,020,822	4,175,203	988,495	13,251,443	108,058
WASHINGTON	167,799,288	137,763,769	10,812,065	1,154,633	17,989,400	79,421
WEST VIRGINIA	40,952,987	34,368,249	2,270,221	349,945	3,903,851	60,686
WISCONSIN	192,074,709	164,426,379	20,585,469	870,775	6,052,226	139,900
WYOMING	6,431,339	4,364,[illegible]	561,185	145,227	1,279,003	81,264
TOTAL U.S.	$6,619,880,384	$5,725,950,699	$378,881,200	$32,786,287	$477,397,491	$4,784,707
AMERICAN SAMOA	888,612	702,931	44,822	6,740	55,508	78,611
GUAM	303,098	200,132	4,373	11,021	636	86,936
PUERTO RICO	41,178,586	27,70[illegible],288	5,299,930	343,414	7,764,621	50,335
TRUST TERRITORY	128,981	0	7,053	20,817	8,993	92,118
VIRGIN ISLANDS	75,000	0	0	0	0	75,000
OUTLYING AREAS	$42,574,271	$28,603,343	$5,356,178	$401,992	$7,829,758	$383,000
U.S. AND OUTLYING AREAS	$6,662,374,655	$5,754,554,042	$384,237,378	$33,188,279	$485,227,249	$5,167,707

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

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TABLE 7.5 -- VOCATIONAL EDUCATION (VEA) EXPENDITURES, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79
(SUM OF SECTIONS 120, 130, 140, AND 150)
(INCLUDES CARRYOVER AND UNLIQUIDATED OBLIGATIONS)

STATE OR OUTLYING AREA	EXPENDITURES			OUTLAYS			UNLIQUIDATED OBLIGATIONS		
	TOTAL	NON-FEDERAL	FEDERAL	TOTAL	NON-FEDERAL	FEDERAL	TOTAL	NON-FEDERAL	FEDERAL
				AMOUNT, IN THOUSANDS					
ALABAMA	73,842	60,786	13,056	71,843	60,786	11,057	1,999	0	1,999
ALASKA	13,061	11,422	1,639	12,774	11,422	1,352	287	0	287
ARIZONA	40,567	34,157	6,410	40,567	34,157	6,410	0	0	0
ARKANSAS	38,288	32,334	5,954	38,288	32,334	5,954	0	0	0
CALIFORNIA	986,951	913,939	73,012	984,288	913,939	70,349	2,663	0	2,663
COLORADO	74,100	66,680	7,420	74,100	66,680	7,420	0	0	0
CONNECTICUT	67,273	60,357	6,917	67,273	60,357	6,917	0	0	0
DELAWARE	34,765	33,268	1,497	34,765	33,268	1,497	0	0	0
DISTRICT OF COLUMBIA	6,105	4,363	1,742	6,025	4,363	1,663	80	0	80
FLORIDA	411,975	377,239	34,736	394,962	377,239	17,723	17,013	0	17,013
GEORGIA	122,527	105,519	17,008	112,963	97,862	15,101	9,563	7,656	1,907
HAWAII	14,738	12,415	2,323	14,158	12,093	2,066	580	323	257
IDAHO	17,514	14,726	2,789	17,514	14,726	2,789	0	0	0
ILLINOIS	358,761	341,937	16,824	358,761	341,937	16,824	0	0	0
INDIANA	80,398	66,759	13,639	80,398	66,759	13,639	0	0	0
IOWA	70,062	62,420	7,642	70,062	62,420	7,642	0	0	0
KANSAS	42,665	37,017	5,649	42,167	37,017	5,150	499	0	499
KENTUCKY	79,006	67,713	11,294	78,587	67,713	10,874	419	0	419
LOUISIANA	68,722	56,856	11,866	68,722	56,856	11,866	0	0	0
MAINE	23,895	20,475	3,419	23,895	20,475	3,419	0	0	0
MARYLAND	118,531	104,019	14,512	118,531	104,019	14,512	0	0	0
MASSACHUSETTS	265,275	245,106	20,169	257,958	245,106	12,852	7,317	0	7,317
MICHIGAN	262,079	236,394	25,685	245,784	229,684	16,100	16,295	6,710	9,585
MINNESOTA	114,147	103,138	11,009	114,025	103,138	10,887	122	0	122
MISSISSIPPI	52,186	44,112	8,074	52,186	44,112	8,074	0	0	0
MISSOURI	91,494	78,337	13,156	91,494	78,337	13,156	0	0	0
MONTANA	0	0	0	0	0	0	0	0	0
NEBRASKA	25,609	21,536	4,072	25,609	21,536	4,072	0	0	0
NEVADA	13,453	12,016	1,437	13,453	12,016	1,437	0	0	0
NEW HAMPSHIRE	13,030	10,454	2,576	12,585	10,454	2,131	445	0	445
NEW JERSEY	178,599	162,330	16,269	178,599	162,330	16,269	0	0	0
NEW MEXICO	30,238	24,832	5,406	28,563	24,832	3,731	1,675	0	1,675
NEW YORK	588,254	552,161	36,093	588,254	552,161	36,093	0	0	0
NORTH CAROLINA	207,926	190,609	17,316	207,926	190,609	17,316	0	0	0
NORTH DAKOTA	16,595	14,594	2,001	16,595	14,594	2,001	0	0	0
OHIO	364,053	328,369	35,684	352,436	321,824	30,612	11,617	6,545	5,072
OKLAHOMA	90,403	82,206	8,19[illegible]	89,474	81,392	8,082	928	813	115
OREGON	24,136	15,579	8,557	22,255	15,579	6,676	1,881	0	1,881
PENNSYLVANIA	303,515	269,625	33,891	293,188	269,625	23,563	10,327	0	10,327
RHODE ISLAND	28,684	26,022	2,662	28,523	26,022	2,501	161	0	161
SOUTH CAROLINA	136,093	126,419	9,674	136,093	126,419	9,674	0	0	0
SOUTH DAKOTA	10,741	8,696	2,045	10,741	8,696	2,045	0	0	0
TENNESSEE	116,034	103,362	12,672	[illegible],034	103,362	12,672	0	0	0
TEXAS	334,967	289,589	45,378	273,083	244,155	28,928	61,884	45,434	16,450
UTAH	44,572	39,716	4,856	44,572	39,716	4,856	0	0	0
VERMONT	10,854	9,455	1,399	10,854	9,455	1,399	0	0	0
VIRGINIA	141,436	128,114	13,322	141,436	128,114	13,322	0	0	0
WASHINGTON	167,720	151,551	16,168	163,687	151,551	12,135	4,033	0	4,033
WEST VIRGINIA	40,892	35,095	5,797	40,768	35,095	5,673	124	0	124
WISCONSIN	191,935	170,578	21,357	163,075	150,632	12,443	28,860	19,946	8,914
WYOMING	6,350	5,005	1,345	5,780	4,723	1,057	570	282	288
TOTAL U.S.	$6,615,016	$5,969,401	$645,617	$6,435,673	$5,881,691	$553,983	$179,342	$87,709	$91,633
AMERICAN SAMOA	810	522	288	810	522	288	0	0	0
GUAM	216	0	216	155	0	155	61	0	61
PUERTO RICO	41,128	29,167	11,962	39,352	28,693	10,659	1,777	474	1,302
TRUST TERRITORY	37	0	37	22	0	22	15	0	15
VIRGIN ISLANDS	0	0	0	0	0	0	0	0	0
OUTLYING AREAS	$42,191	$29,689	$12,503	$40,339	$29,215	$11,124	$1,853	$474	$1,378
U.S. AND OUTLYING AREAS	$6,657,207	$5,999,090	$658,120	$6,476,012	$5,910,906	$565,107	$181,195	$88,183	$93,011

NOTE: DETAILS MAY NOT ADD TO TOTALS BECAUSE OF ROUNDING.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.6 -- VOCATIONAL EDUCATION (VEA) SECTION 120 EXPENDITURES, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER AND UNLIQUIDATED OBLIGATIONS)

STATE OR OUTLYING AREA	EXPENDITURES			OUTLAYS			UNLIQUIDATED OBLIGATIONS		
	TOTAL	NON-FEDERAL	FEDERAL	TOTAL	NON-FEDERAL	FEDERAL	TOTAL	NON-FEDERAL	FEDERAL
	AMOUNT, IN THOUSANDS								
ALABAMA	61,379	51,794	9,586	59,545	51,794	7,751	1,835	0	1,835
ALASKA	12,235	11,051	1,184	12,029	11,051	978	205	0	205
ARIZONA	33,441	29,057	4,383	33,441	29,057	4,383	0	0	0
ARKANSAS	28,372	23,917	4,454	28,372	23,917	4,454	0	0	0
CALIFORNIA	856,884	804,740	52,144	855,498	804,740	50,759	1,385	0	1,385
COLORADO	64,707	59,500	5,206	64,707	59,500	5,206	0	0	0
CONNECTICUT	57,922	52,730	5,192	57,922	52,730	5,192	0	0	0
DELAWARE	31,688	30,579	1,109	31,688	30,579	1,109	0	0	0
DISTRICT OF COLUMBIA	5,257	4,017	1,240	5,186	4,017	1,169	71	0	71
FLORIDA	367,577	342,114	25,463	354,562	342,114	12,448	13,014	0	13,014
GEORGIA	105,525	93,026	12,499	97,103	85,659	11,443	8,423	7,367	1,056
HAWAII	12,347	10,713	1,634	11,863	10,401	1,461	485	312	173
IDAHO	14,108	12,090	2,018	14,108	12,090	2,018	0	0	0
ILLINOIS	338,706	326,875	11,831	338,706	326,875	11,831	0	0	0
INDIANA	68,728	59,064	9,664	68,728	59,064	9,664	0	0	0
IOWA	62,762	57,072	5,690	62,762	57,072	5,690	0	0	0
KANSAS	35,315	31,240	4,074	34,967	31,240	3,726	348	0	348
KENTUCKY	66,982	58,759	8,223	66,631	58,759	7,872	351	0	351
LOUISIANA	48,829	40,288	8,541	48,829	40,288	8,541	0	0	0
MAINE	20,912	18,450	2,462	20,912	18,450	2,462	0	0	0
MARYLAND	95,952	85,606	10,346	95,952	85,606	10,346	0	0	0
MASSACHUSETTS	239,294	223,920	15,374	233,891	223,920	9,970	5,404	0	5,404
MICHIGAN	203,701	187,642	16,059	189,734	181,367	8,368	13,966	6,275	7,691
MINNESOTA	98,379	90,574	7,804	98,379	90,574	7,804	0	0	0
MISSISSIPPI	39,414	33,652	5,761	39,414	33,652	5,761	0	0	0
MISSOURI	62,093	52,942	9,151	62,093	52,942	9,151	0	0	0
MONTANA	0	0	0	0	0	0	0	0	0
NEBRASKA	21,028	18,046	2,983	21,028	18,046	2,983	0	0	0
NEVADA	12,002	10,928	1,074	12,002	10,928	1,074	0	0	0
NEW HAMPSHIRE	10,254	8,383	1,871	10,003	8,383	1,620	252	0	252
NEW JERSEY	165,329	153,445	11,884	165,329	153,445	11,884	0	0	0
NEW MEXICO	25,917	21,872	4,045	24,815	21,872	2,943	1,102	0	1,102
NEW YORK	567,159	541,543	25,616	567,159	541,543	25,616	0	0	0
NORTH CAROLINA	183,426	170,952	12,474	183,426	170,952	12,474	0	0	0
NORTH DAKOTA	13,806	12,393	1,413	13,806	12,393	1,413	0	0	0
OHIO	291,463	265,610	25,853	281,514	259,317	22,197	9,949	6,293	3,656
OKLAHOMA	79,293	73,397	5,896	78,520	72,661	5,859	773	736	37
OREGON	21,174	15,124	6,050	19,932	15,124	4,808	1,242	0	1,242
PENNSYLVANIA	279,637	255,546	24,091	272,345	255,546	16,799	7,292	0	7,292
RHODE ISLAND	24,501	22,514	1,987	24,368	22,514	1,853	134	0	134
SOUTH CAROLINA	123,546	116,659	6,887	123,546	116,659	6,887	0	0	0
SOUTH DAKOTA	7,881	6,338	1,544	7,881	6,338	1,544	0	0	0
TENNESSEE	92,005	83,839	8,165	92,005	83,839	8,165	0	0	0
TEXAS	262,018	229,020	32,998	222,022	200,161	21,861	39,996	28,859	11,137
UTAH	39,959	36,617	3,342	39,959	36,617	3,342	0	0	0
VERMONT	9,101	8,058	1,043	9,101	8,058	1,043	0	0	0
VIRGINIA	123,021	113,450	9,571	123,021	113,450	9,571	0	0	0
WASHINGTON	137,764	126,599	11,165	135,277	126,599	8,678	2,487	0	2,487
WEST VIRGINIA	34,368	30,283	4,085	34,368	30,283	4,085	0	0	0
WISCONSIN	164,426	149,050	15,376	140,188	131,049	9,138	24,239	18,000	6,239
WYOMING	4,365	3,493	871	4,096	3,359	737	269	135	135
TOTAL U.S.	$5,725,952	$5,264,571	$461,376	$5,592,733	$5,196,594	$396,131	$133,222	$67,977	$65,245
AMERICAN SAMOA	703	486	217	703	486	217	0	0	0
GUAM	200	0	200	142	0	142	58	0	58
PUERTO RICO	27,700	19,135	8,565	26,326	18,685	7,641	1,374	451	924
TRUST TERRITORY	0	0	0	0	0	0	0	0	0
VIRGIN ISLANDS	0	0	0	0	0	0	0	0	0
OUTLYING AREAS	$28,603	$19,621	$8,982	$27,171	$19,171	$8,000	$1,432	$451	$982
U.S. AND OUTLYING AREAS	$5,754,555	$5,284,192	$470,358	$5,619,904	$5,215,765	$404,131	$134,654	$68,428	$66,227

NOTE: DETAILS MAY NOT ADD TO TOTALS BECAUSE OF ROUNDING.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.7 -- VOCATIONAL EDUCATION (VEA) SECTION 130 EXPENDITURES, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79
(INCLUDES CARRYOVER AND UNLIQUIDATED OBLIGATIONS)

STATE OR OUTLYING AREA	EXPENDITURES TOTAL	EXPENDITURES NON-FEDERAL	EXPENDITURES FEDERAL	OUTLAYS TOTAL	OUTLAYS NON-FEDERAL	OUTLAYS FEDERAL	UNLIQUIDATED OBLIGATIONS TOTAL	UNLIQUIDATED OBLIGATIONS NON-FEDERAL	UNLIQUIDATED OBLIGATIONS FEDERAL
				AMOUNT, IN THOUSANDS					
ALABAMA	5,331	3,050	2,281	5,279	3,050	2,229	52	0	52
ALASKA	329	49	280	287	49	238	42	0	42
ARIZONA	2,062	646	1,416	2,062	646	1,416	0	0	0
ARKANSAS	4,805	3,903	902	4,805	3,903	902	0	0	0
CALIFORNIA	52,547	38,588	13,959	51,270	38,588	12,682	1,277	0	1,277
COLORADO	3,873	2,532	1,341	3,873	2,532	1,341	0	0	0
CONNECTICUT	2,430	1,452	978	2,430	1,452	978	0	0	0
DELAWARE	1,304	1,061	244	1,304	1,061	244	0	0	0
DISTRICT OF COLUMBIA	345	34	311	340	34	306	5	0	5
FLORIDA	17,723	12,260	5,464	15,755	12,260	3,495	1,968	0	1,968
GEORGIA	4,360	1,372	2,988	3,575	1,194	2,380	785	178	608
HAWAII	1,078	634	444	1,032	627	405	47	7	40
IDAHO	1,237	773	464	1,237	773	464	0	0	0
ILLINOIS	4,417	1,765	2,652	4,417	1,765	2,652	0	0	0
INDIANA	3,967	1,713	2,254	3,967	1,713	2,254	0	0	0
IOWA	1,847	624	1,223	1,847	624	1,223	0	0	0
KANSAS	2,319	1,308	1,011	2,198	1,308	890	121	0	121
KENTUCKY	2,692	783	1,909	2,664	783	1,881	28	0	28
LOUISIANA	10,322	8,273	2,049	10,322	8,273	2,049	0	0	0
MAINE	935	402	534	935	402	534	0	0	0
MARYLAND	5,517	2,943	2,574	5,517	2,943	2,574	0	0	0
MASSACHUSETTS	9,649	6,464	3,184	8,425	6,464	1,960	1,224	0	1,224
MICHIGAN	37,686	30,661	7,025	35,552	30,255	5,297	2,133	406	1,728
MINNESOTA	8,792	6,725	2,067	8,792	6,725	2,067	0	0	0
MISSISSIPPI	6,941	5,570	1,371	6,941	5,570	1,371	0	0	0
MISSOURI	20,329	17,661	2,668	20,329	17,661	2,668	0	0	0
MONTANA	0	0	0	0	0	0	0	0	0
NEBRASKA	1,677	1,023	654	1,677	1,023	654	0	0	0
NEVADA	276	62	214	276	62	214	0	0	0
NEW HAMPSHIRE	743	361	382	617	361	256	125	0	125
NEW JERSEY	6,264	3,700	2,564	6,264	3,700	2,564	0	0	0
NEW MEXICO	934	95	839	590	95	495	344	0	344
NEW YORK	7,656	500	7,156	7,656	500	7,156	0	0	0
NORTH CAROLINA	10,305	7,195	3,110	10,305	7,195	3,110	0	0	0
NORTH DAKOTA	841	489	352	841	489	352	0	0	0
OHIO	18,652	12,596	6,057	17,801	12,460	5,341	852	136	716
OKLAHOMA	5,219	3,711	1,507	5,066	3,639	1,426	153	72	81
OREGON	1,849	172	1,677	1,407	172	1,235	442	0	442
PENNSYLVANIA	18,353	11,970	6,383	16,371	11,970	4,402	1,981	0	1,981
RHODE ISLAND	1,368	971	397	1,363	971	392	5	0	5
SOUTH CAROLINA	6,669	4,920	1,749	6,669	4,920	1,749	0	0	0
SOUTH DAKOTA	614	285	329	614	285	329	0	0	0
TENNESSEE	4,934	2,639	2,296	4,934	2,639	2,296	0	0	0
TEXAS	37,870	28,457	9,413	17,133	11,947	5,186	20,737	16,511	4,226
UTAH	2,915	1,947	968	2,915	1,947	968	0	0	0
VERMONT	500	279	222	500	279	222	0	0	0
VIRGINIA	4,175	1,918	2,257	4,175	1,918	2,257	0	0	0
WASHINGTON	10,812	7,659	3,153	9,845	7,659	2,186	967	0	967
WEST VIRGINIA	2,270	1,140	1,130	2,212	1,140	1,072	59	0	59
WISCONSIN	20,585	16,773	3,813	17,095	14,986	2,109	3,490	1,787	1,704
WYOMING	561	271	290	346	164	182	215	108	108
TOTAL U.S.	$378,879	$260,379	$118,503	$341,827	$241,176	$100,651	$37,052	$19,205	$17,851
AMERICAN SAMOA	45	0	45	45	0	45	0	0	0
GUAM	4	0	4	1	0	1	3	0	3
PUERTO RICO	5,300	3,067	2,233	5,058	3,062	1,996	242	5	237
TRUST TERRITORY	7	0	7	1	0	1	6	0	6
VIRGIN ISLANDS	0	0	0	0	0	0	0	0	0
OUTLYING AREAS	$5,356	$3,067	$2,289	$5,105	$3,062	$2,043	$251	$5	$246
U.S. AND OUTLYING AREAS	$384,235	$263,446	$120,792	$346,932	$244,238	$102,694	$37,303	$19,210	$18,097

NOTE: DETAILS MAY NOT ADD TO TOTALS BECAUSE OF ROUNDING.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.8 -- VOCATIONAL EDUCATION (VEA) SECTION 140 EXPENDITURES, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79
(INCLUDES CARRYOVER AND UNLIQUIDATED OBLIGATIONS)

STATE OR OUTLYING AREA	EXPENDITURES TOTAL	EXPENDITURES NON-FEDERAL	EXPENDITURES FEDERAL	OUTLAYS TOTAL	OUTLAYS NON-FEDERAL	OUTLAYS FEDERAL	UNLIQUIDATED OBLIGATIONS TOTAL	UNLIQUIDATED OBLIGATIONS NON-FEDERAL	UNLIQUIDATED OBLIGATIONS FEDERAL
	AMOUNT, IN THOUSANDS								
ALABAMA	402	0	402	343	0	343	59	0	59
ALASKA	69	9	60	55	9	46	14	0	14
ARIZONA	190	40	150	190	40	150	0	0	0
ARKANSAS	156	9	146	156	9	146	0	0	0
CALIFORNIA	3,165	896	2,269	3,165	896	2,269	0	0	0
COLORADO	337	11	326	337	11	326	0	0	0
CONNECTICUT	453	193	260	453	193	260	0	0	0
DELAWARE	116	80	36	116	80	36	0	0	0
DISTRICT OF COLUMBIA	62	0	62	60	0	60	3	0	3
FLORIDA	5,864	4,613	1,251	5,154	4,613	541	710	0	710
GEORGIA	374	0	374	196	0	196	178	0	178
HAWAII	72	0	72	64	0	64	8	0	8
IDAHO	138	8	130	138	8	130	0	0	0
ILLINOIS	782	303	479	782	303	479	0	0	0
INDIANA	1,469	703	767	1,469	703	767	0	0	0
IOWA	343	146	198	343	146	198	0	0	0
KANSAS	219	72	147	190	72	117	29	0	29
KENTUCKY	334	0	334	319	0	319	15	0	15
LOUISIANA	1,920	1,524	397	1,920	1,524	397	0	0	0
MAINE	191	0	191	191	0	191	0	0	0
MARYLAND	505	8	497	505	8	497	0	0	0
MASSACHUSETTS	592	0	592	291	0	291	302	0	302
MICHIGAN	920	180	740	800	160	640	120	20	100
MINNESOTA	366	0	366	366	0	366	0	0	0
MISSISSIPPI	484	221	263	484	221	263	0	0	0
MISSOURI	660	266	393	660	266	393	0	0	0
MONTANA	0	0	0	0	0	0	0	0	0
NEBRASKA	131	10	121	131	10	121	0	0	0
NEVADA	96	42	53	96	42	53	0	0	0
NEW HAMPSHIRE	100	0	100	69	0	69	31	0	31
NEW JERSEY	1,129	628	501	1,129	628	501	0	0	0
NEW MEXICO	139	0	139	54	0	54	85	0	85
NEW YORK	607	0	607	607	0	607	0	0	0
NORTH CAROLINA	539	0	539	539	0	539	0	0	0
NORTH DAKOTA	83	3	80	83	3	80	0	0	0
OHIO	1,511	48	1,463	1,386	48	1,338	125	0	125
OKLAHOMA	269	56	213	269	56	213	0	0	0
OREGON	390	59	331	273	59	213	118	0	118
PENNSYLVANIA	1,437	88	1,350	993	88	905	444	0	444
RHODE ISLAND	169	0	169	151	0	151	18	0	18
SOUTH CAROLINA	383	15	368	383	15	368	0	0	0
SOUTH DAKOTA*	12	0	12	12	0	12	0	0	0
TENNESSEE	464	34	430	464	34	430	0	0	0
TEXAS	948	9	939	571	1	570	377	8	369
UTAH	668	491	177	668	491	177	0	0	0
VERMONT	20	0	20	20	0	20	0	0	0
VIRGINIA	988	485	504	988	485	504	0	0	0
WASHINGTON	1,155	569	585	836	569	267	318	0	318
WEST VIRGINIA	350	222	128	350	222	128	0	0	0
WISCONSIN	871	183	688	499	173	326	372	10	361
WYOMING	145	69	76	95	44	51	50	25	25
TOTAL U.S.	$32,787	$12,293	$20,495	$29,413	$12,230	$17,182	$3,376	[illegible]	$3,312
AMERICAN SAMOA	7	0	7	7	0	7	0	0	0
GUAM	11	0	11	11	0	11	0	0	0
PUERTO RICO	363	0	363	317	0	317	46	0	46
TRUST TERRITORY	21	0	21	21	0	21	0	0	0
VIRGIN ISLANDS	0	0	0	0	0	0	0	0	0
OUTLYING AREAS	$402	$0	$402	$356	$0	$356	$46	$0	$46
U.S. AND OUTLYING AREAS	$33,189	$12,293	$20,897	$29,769	$12,230	$17,538	$3,422	$63	$3,358

NOTE: DETAILS MAY NOT ADD TO TOTALS BECAUSE OF ROUNDING.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.9 -- VOCATIONAL EDUCATION (VEA) SECTION 150 EXPENDITURES, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79
(INCLUDES CARRYOVER AND UNLIQUIDATED OBLIGATIONS)

STATE OR OUTLYING AREA	EXPENDITURES			OUTLAYS			UNLIQUIDATED OBLIGATIONS		
	TOTAL	NON-FEDERAL	FEDERAL	TOTAL	NON-FEDERAL	FEDERAL	TOTAL	NON-FEDERAL	FEDERAL
	AMOUNT, IN THOUSANDS								
ALABAMA	6,730	5,943	787	6,677	5,943	734	53	0	53
ALASKA	427	313	115	402	313	89	26	0	26
ARIZONA	4,874	4,414	460	4,874	4,414	460	0	0	0
ARKANSAS	4,955	4,504	452	4,955	4,504	452	0	0	0
CALIFORNIA	74,355	69,715	4,640	74,355	69,715	4,640	0	0	0
COLORADO	5,183	4,638	546	5,183	4,638	546	0	0	0
CONNECTICUT	6,468	5,982	486	6,468	5,982	486	0	0	0
DELAWARE	1,657	1,549	108	1,657	1,549	108	0	0	0
DISTRICT OF COLUMBIA	441	312	129	440	312	128	1	0	1
FLORIDA	20,811	18,252	2,559	19,491	18,252	1,239	1,320	0	1,320
GEORGIA	12,268	11,121	1,147	12,090	11,009	1,081	178	112	66
HAWAII	1,241	1,068	173	1,200	1,065	136	41	4	37
IDAHO	2,031	1,855	176	2,031	1,855	176	0	0	0
ILLINOIS	14,856	12,994	1,862	14,856	12,994	1,862	0	0	0
INDIANA	6,233	5,278	955	6,233	5,278	955	0	0	0
IOWA	5,109	4,578	531	5,109	4,578	531	0	0	0
KANSAS	4,813	4,396	417	4,813	4,396	417	0	0	0
KENTUCKY	8,998	8,170	828	8,973	8,170	802	26	0	26
LOUISIANA	7,650	6,771	879	7,650	6,771	879	0	0	0
MAINE	1,856	1,623	233	1,856	1,623	233	0	0	0
MARYLAND	16,557	15,462	1,095	16,557	15,462	1,095	0	0	0
MASSACHUSETTS	15,740	14,721	1,019	15,352	14,721	631	388	0	388
MICHIGAN	19,773	17,911	1,862	19,698	17,902	1,795	76	9	67
MINNESOTA	6,610	5,839	771	6,488	5,839	650	122	0	122
MISSISSIPPI	5,347	4,669	678	5,347	4,669	678	0	0	0
MISSOURI	8,413	7,468	945	8,413	7,468	945	0	0	0
MONTANA	0	0	0	0	0	0	0	0	0
NEBRASKA	2,772	2,457	315	2,772	2,457	315	0	0	0
NEVADA	1,080	984	96	1,080	984	96	0	0	0
NEW HAMPSHIRE	1,933	1,710	223	1,896	1,710	186	37	0	37
NEW JERSEY	5,878	4,557	1,320	5,878	4,557	1,320	0	0	0
NEW MEXICO	3,248	2,866	382	3,104	2,866	238	145	0	145
NEW YORK	12,832	10,118	2,714	12,832	10,118	2,714	0	0	0
NORTH CAROLINA	13,656	12,462	1,194	13,656	12,462	1,194	0	0	0
NORTH DAKOTA	1,864	1,709	156	1,864	1,709	156	0	0	0
OHIO	52,427	50,115	2,312	51,736	49,999	1,737	691	116	575
OKLAHOMA	5,621	5,041	581	5,619	5,035	584	2	5	-3
OREGON	722	223	499	644	223	420	79	0	79
PENNSYLVANIA	4,089	2,022	2,067	3,478	2,022	1,457	610	0	610
RHODE ISLAND	2,646	2,536	110	2,642	2,536	106	4	0	4
SOUTH CAROLINA	5,496	4,825	671	5,496	4,825	671	0	0	0
SOUTH DAKOTA	2,234	2,073	161	2,234	2,073	161	0	0	0
TENNESSEE	18,632	16,849	1,782	18,632	16,849	1,782	0	0	0
TEXAS	34,131	32,103	2,029	33,357	32,046	1,311	774	56	718
UTAH	1,030	661	369	1,030	661	369	0	0	0
VERMONT	1,232	1,118	114	1,232	1,118	114	0	0	0
VIRGINIA	13,251	12,261	991	13,251	12,261	991	0	0	0
WASHINGTON	17,989	16,725	1,265	17,729	16,725	1,004	261	0	261
WEST VIRGINIA	3,904	3,450	454	3,838	3,450	388	66	0	66
WISCONSIN	6,052	4,572	1,480	5,293	4,423	870	759	149	611
WYOMING	1,279	1,172	107	1,243	1,157	86	36	15	21
TOTAL U.S.	$477,394	$432,155	$45,245	$471,704	$431,688	$40,018	$5,695	$466	$5,230
AMERICAN SAMOA	56	37	19	56	37	19	0	0	0
GUAM	1	0	1	0	0	0	0	0	0
PUERTO RICO	7,765	6,964	801	7,650	6,946	704	114	18	96
TRUST TERRITORY	9	0	9	0	0	0	9	0	9
VIRGIN ISLANDS	0	0	0	0	0	0	0	0	0
OUTLYING AREAS	$7,831	$7,001	$830	$7,706	$6,983	$723	$123	$18	$105
U.S. AND OUTLYING AREAS	$485,225	$439,156	$46,075	$479,410	$438,671	$40,741	$5,818	$484	$5,335

NOTE: DETAILS MAY NOT ADD TO TOTALS BECAUSE OF ROUNDING.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

Table 7.10
Total Federal vocational expenditures (VEA), for Sections 120, 130, 140, and 150:
Fiscal year 1978

(Including carryover)

State or outlying area	Total Federal expenditures	Section 120	Section 130	Section 140	Section 150
Total	$499,105,884	$379,555,148	$64,663,668	$17,133,184	$37,753,884
Alabama	13,143,181	10,517,164	1,448,708	365,756	811,553
Alaska	1,048,508	843,587	133,192	34,621	37,108
Arizona	6,294,505	4,487,191	1,123,396	218,534	465,384
Arkansas	5,403,005	3,912,838	811,429	223,737	455,001
California	32,594,621	25,805,231	2,914,021	1,372,053	2,503,316
Colorado	6,945,793	5,053,074	1,024,378	238,238	630,103
Connecticut	5,961,074	4,499,121	783,880	204,297	473,776
Delaware	1,512,639	1,056,345	285,306	53,288	117,700
District of Columbia	2,026,524	1,399,978	399,207	70,914	156,425
Florida	16,121,464	12,431,558	2,240,611	414,191	1,035,104
Georgia	12,743,500	9,081,984	2,235,383	282,582	1,143,551
Hawaii	2,668,834	1,967,515	418,325	89,892	193,102
Idaho	2,654,781	1,878,827	506,202	88,913	180,839
Illinois	23,661,045	18,357,623	2,534,313	769,323	1,999,786
Indiana	14,111,632	10,953,080	1,579,812	514,943	1,063,797
Iowa	7,776,283	5,956,744	1,042,213	247,915	529,411
Kansas	4,475,253	3,601,435	408,026	117,531	348,261
Kentucky	9,455,373	7,075,630	1,164,903	367,391	847,449
Louisiana	12,091,403	8,781,341	1,958,184	436,693	915,185
Maine	3,545,751	2,745,175	444,038	33,821	322,717
Maryland	10,328,381	8,183,251	959,099	464,780	721,251
Massachusetts	5,392,197	4,126,313	601,169	71,192	593,523
Michigan	17,893,779	13,175,686	1,970,984	1,009,424	1,737,685
Minnesota	13,446,640	10,761,325	1,523,206	449,917	712,192
Mississippi	9,726,688	7,393,170	1,378,896	265,024	689,598
Missouri	13,289,053	10,549,430	1,501,149	312,804	925,670
Montana	2,340,190	1,750,854	332,134	94,953	162,249
Nebraska	3,840,571	2,771,904	584,544	168,559	315,564
Nevada	685,751	557,225	55,962	5,240	67,324
New Hampshire	1,689,974	1,338,526	118,313	73,874	159,261
New Jersey	15,185,798	11,155,367	2,426,432	570,467	1,033,532
New Mexico	2,834,588	2,258,019	368,792	42,768	165,009
New York	37,947,201	27,917,551	5,849,677	1,224,724	2,955,249
North Carolina	19,109,511	14,341,668	2,972,573	585,285	1,209,985
North Dakota	1,941,650	1,354,396	328,720	104,374	154,160

Table 7.10
Total Federal vocational expenditures (VEA), for Sections 120, 130, 140, and 150: Fiscal year 1978 -- continued
(Including carryover)

State or outlying area	Total Federal expenditures	Section 120	Section 130	Section 140	Section 150
Ohio	$ 25,757,868	$ 18,217,790	$ 4,462,020	$ 625,828	$ 2,452,230
Oklahoma	7,675,900	5,766,944	1,075,233	276,166	557,557
Oregon	3,797,357	2,600,104	680,340	97,397	419,516
Pennsylvania	28,798,232	22,183,375	3,159,852	1,242,278	2,212,727
Rhode Island	2,439,792	1,815,714	412,293	27,441	184,344
South Carolina	9,656,691	6,694,109	1,881,213	330,066	751,303
South Dakota	2,164,643	1,613,402	298,226	85,969	167,046
Tennessee	10,994,285	9,065,698	859,242	475,277	594,068
Texas	21,487,357	17,146,711	1,905,341	1,192,919	1,242,386
Utah	3,539,736	2,704,137	484,928	103,798	246,873
Vermont	1,530,102	1,109,441	256,247	44,635	119,779
Virginia	12,567,910	9,910,344	1,411,139	335,294	911,133
Washington	4,682,511	3,617,236	743,191	71,477	250,607
West Virginia	5,931,104	4,751,256	555,527	156,876	467,445
Wisconsin	7,950,120	6,104,820	987,022	203,083	655,195
Wyoming	783,461	602,586	104,866	14,432	61,577
Outlying area:					
American Samoa	71,694	59,149	9,086	3,459	0
Commonwealth of Northern Marianas	9,360	2,754	6,606	0	0
Guam	0	0	0	0	0
Puerto Rico	9,378,224	7,547,056	944,119	258,771	628,278
Trust Territory of the Pacific Islands	2,396	2,396	0	0	0
Virgin Islands	0	0	0	0	0

SOURCE: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Report, 1978.

Table 7.11
Allocations and expenditures of Federal (VEA) funds, by legislative section: Fiscal years 1978 and 1979

Fiscal year	Total	Section 120	Section 130	Section 140	Section 150
Allocations					
1979	$598,955	$430,468	$107,617	$19,960	$40,910
1978	577,072	412,980	103,245	19,952	40,895
Percent change	3.8	4.2	4.2	0.04	0.04
Expenditures					
1979	658,120	470,358	120,792	20,897	46,075
1978	499,106	379,555	64,664	17,133	37,754
Percent change	31.9	23.9	86.8	22.0	22.0

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Vocational Education Data System; U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Report, 1978.

TABLE 7.12 -- ALLOCATION OF FEDERAL (VEA) FUNDS, BY LEGISLATIVE SECTION AND BY STATE OR OUTLYING AREA: FISCAL YEAR 1979

STATE OR OUTLYING AREA	TOTAL	BASIC GRANTS (SEC 120)	PROGRAM IMPROVEMENT (SEC 130)	DISADVANTAGED (SEC 140)	CONSUMER AND HOMEMAKING (SEC 150)	STATE ADVISORY COUNCILS (SEC 105)
ALABAMA	12,122,355	8,657,073	2,164,268	401,392	822,734	76,888
ALASKA	1,135,111	761,901	190,476	35,326	72,408	75,000
ARIZONA	6,759,843	4,803,619	1,200,955	222,733	456,536	75,000
ARKANSAS	6,686,580	4,751,740	1,187,935	220,318	451,587	75,000
CALIFORNIA	52,371,540	37,531,105	9,382,776	1,740,161	3,566,809	150,689
COLORADO	7,500,859	5,336,962	1,334,240	247,453	507,204	75,000
CONNECTICUT	7,045,393	5,006,794	1,251,698	232,144	475,826	78,931
DELAWARE	1,513,507	1,087,757	271,939	50,435	103,376	0
DISTRICT OF COLUMBIA	1,801,881	1,241,109	310,277	57,545	117,950	75,000
FLORIDA	21,803,320	15,670,037	3,917,509	726,555	1,489,219	0
GEORGIA	15,663,906	11,257,643	2,814,411	521,970	1,069,882	0
HAWAII	2,375,471	1,653,347	413,337	76,659	157,128	75,000
IDAHO	2,656,718	1,855,479	463,870	86,032	176,337	75,000
ILLINOIS	25,992,754	18,572,682	4,643,170	861,138	1,765,075	150,689
INDIANA	15,276,676	10,909,702	2,727,426	505,838	1,036,815	96,895
IOWA	7,982,000	5,682,758	1,420,690	263,485	540,067	75,000
KANSAS	6,375,820	4,528,397	1,132,099	209,963	430,361	75,000
KENTUCKY	11,035,265	7,877,138	1,969,285	365,230	748,612	75,000
LOUISIANA	13,034,471	9,308,453	2,327,113	431,594	884,639	82,672
MAINE	3,462,373	2,434,504	608,626	112,877	231,366	75,000
MARYLAND	10,777,065	7,691,570	1,922,893	356,625	730,977	75,000
MASSACHUSETTS	15,406,227	10,998,255	2,749,564	509,943	1,045,231	103,234
MICHIGAN	24,832,888	17,739,086	4,434,771	822,488	1,685,854	150,689
MINNESOTA	11,486,090	8,201,160	2,050,270	380,254	779,406	75,000
MISSISSIPPI	7,988,544	5,687,461	1,421,865	263,704	540,514	75,000
MISSOURI	13,953,638	9,964,866	2,491,217	462,029	947,022	88,504
MONTANA	2,425,715	1,689,458	422,364	78,334	160,559	75,000
NEBRASKA	4,503,736	3,182,931	795,733	147,579	302,493	75,000
NEVADA	1,541,957	1,054,695	263,674	48,902	100,234	74,452
NEW HAMPSHIRE	2,421,360	1,685,940	421,485	78,710	160,225	75,000
NEW JERSEY	16,122,899	11,587,521	2,896,880	537,266	1,101,232	0
NEW MEXICO	4,178,869	2,949,449	737,362	136,754	280,304	75,000
NEW YORK	41,878,037	29,983,747	7,495,937	1,390,221	2,849,537	158,595
NORTH CAROLINA	17,505,432	12,558,480	3,139,620	502,284	1,193,509	111,539
NORTH DAKOTA	2,291,295	1,592,850	398,213	73,854	151,378	75,000
OHIO	29,753,463	21,275,502	5,318,876	986,456	2,021,940	150,689
OKLAHOMA	8,298,541	5,910,256	1,477,564	274,033	561,688	75,000
OREGON	6,448,847	4,580,881	1,145,220	212,397	435,349	75,000
PENNSYLVANIA	31,120,131	22,366,026	5,591,506	1,037,020	2,125,579	0
RHODE ISLAND	2,712,326	1,895,445	473,861	87,884	180,136	75,000
SOUTH CAROLINA	9,872,005	7,041,103	1,760,276	326,467	669,159	75,000
SOUTH DAKOTA	2,430,744	1,693,072	423,268	78,501	160,903	75,000
TENNESSEE	13,316,834	9,510,098	2,377,524	440,944	903,802	84,466
TEXAS	36,856,599	26,380,523	6,595,131	1,223,155	2,507,101	150,689
UTAH	4,307,762	3,042,085	760,521	141,048	289,108	75,000
VERMONT	1,695,075	1,164,347	291,087	53,986	110,655	75,000
VIRGINIA	14,795,736	10,566,243	2,641,561	489,913	1,004,174	93,845
WASHINGTON	9,509,535	6,780,596	1,695,149	314,389	644,401	75,000
WEST VIRGINIA	5,581,216	3,957,315	989,329	183,484	376,088	75,000
WISCONSIN	13,654,493	9,751,236	2,437,808	452,125	926,719	86,605
WYOMING	1,299,783	880,251	220,063	40,813	83,656	75,000
TOTAL U.S.	$591,641,885	$422,290,848	$105,572,692	$19,580,410	$40,132,864	$4,065,071
AMERICAN SAMOA	275,000	143,740	35,935	6,665	13,660	75,000
GUAM	404,918	237,112	59,278	10,994	22,534	75,000
PUERTO RICO	10,287,297	7,393,476	1,848,369	342,805	702,647	0
TRUST TERRITORY	401,960	234,986	58,746	10,896	22,332	75,000
VIRGIN ISLANDS	308,121	167,544	41,886	7,768	15,923	75,000
OUTLYING AREAS	$11,677,296	$8,176,858	$2,044,214	$379,128	$777,096	$300,000
U.S. AND OUTLYING AREAS	$603,319,181	$430,467,706	$107,616,906	$19,959,538	$40,909,960	$4,365,071

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

Table 7.13
Allocation of Federal (VEA) funds, by legislative section and by State or outlying area: Fiscal year 1978

State or outlying area	Total	120 Basic grants	130 Program improvements and supportive services	140 Special programs for disadvantaged	150 Consumer homemaking education
Total	577,071,662	412,980,320	103,245,080	19,951,675	40,894,587
Alabama	11,600,489	8,301,864	2,075,466	401,075	822,084
Alaska	1,060,112	758,667	189,667	36,652	75,126
Arizona	6,320,754	4,523,433	1,130,859	218,534	447,928
Arkansas	6,420,558	4,594,858	1,148,715	221,984	455,001
California	50,254,489	35,964,514	8,991,128	1,737,498	3,561,349
Colorado	7,071,522	5,060,719	1,265,180	244,491	501,132
Connecticut	6,570,060	4,702,106	1,175,527	227,166	465,261
Delaware	1,513,507	1,083,138	270,784	52,328	107,257
District of Columbia	1,726,882	1,235,839	308,960	59,705	122,378
Florida	20,556,621	14,711,301	3,677,825	710,724	1,456,771
Georgia	14,938,137	10,690,445	2,672,611	516,471	1,058,610
Hawaii	2,228,362	1,594,722	398,681	77,043	157,916
Idaho	2,551,828	1,826,210	456,553	88,226	180,839
Illinois	25,151,797	17,999,828	4,499,957	869,598	1,782,414
Indiana	14,637,575	10,475,348	2,618,837	506,079	1,037,311
Iowa	7,470,558	5,346,288	1,336,572	258,287	529,411
Kansas	5,988,932	4,285,966	1,071,492	207,061	424,413
Kentucky	10,626,227	7,604,636	1,901,159	367,391	753,041
Louisiana	12,571,123	8,996,497	2,249,123	434,634	890,869
Maine	3,252,644	2,327,748	581,936	112,457	230,503
Maryland	10,201,119	7,300,408	1,825,103	352,693	722,915
Massachusetts	14,773,623	10,572,710	2,643,178	510,783	1,046,952
Michigan	23,288,986	16,666,711	4,166,678	805,193	1,650,404
Minnesota	10,730,418	7,679,200	1,919,800	370,993	760,425
Mississippi	7,665,413	5,485,736	1,371,434	265,024	543,219

Table 7.13
Allocation of Federal (VEA) funds, by legislative section, and by State or outlying area: Fiscal year 1978 -- continued

State or outlying area	Total	120 Basic grants	130 Program improvements and supportive services	140 Special programs for disadvantaged	150 Consumer homemaking education
Missouri	13,274,709	9,500,016	2,375,005	458,959	940,729
Montana	2,340,960	1,675,303	418,826	80,936	165,895
Nebraska	4,144,155	2,965,755	741,439	143,280	293,681
Nevada	1,408,783	1,008,192	252,049	48,707	99,835
New Hampshire	2,285,330	1,635,492	408,872	79,013	161,953
New Jersey	15,910,559	11,38[illegible]57	2,846,589	550,091	1,127,522
New Mexico	3,914,854	2,801,657	700,414	135,352	277,431
New York	40,109,681	28,704,405	7,176,101	1,386,751	2,842,424
North Carolina	17,074,195	12,219,110	3,054,777	590,323	1,209,985
North Dakota	2,216,294	1,586,086	396,521	76,626	157,061
Ohio	28,885,324	20,671,719	5,167,929	998,681	2,046,995
Oklahoma	7,900,471	5,653,955	1,413,488	273,151	559,877
Oregon	6,104,471	4,368,651	1,092,163	211,056	432,601
Pennsylvania	30,454,789	21,794,902	5,448,726	1,052,943	2,158,218
Rhode Island	2,637,326	1,887,397	471,849	91,183	186,897
South Carolina	9,522,525	6,814,774	1,703,693	329,232	674,826
South Dakota	2,355,743	1,685,882	421,471	81,447	166,943
Tennessee	12,709,683	9,095,656	2,273,915	439,424	900,688
Texas	35,114,925	25,129,919	6,282,479	1,214,063	2,488,464
Utah	4,047,125	2,896,316	724,079	139,925	286,805
Vermont	1,620,074	1,159,402	289,851	56,012	114,809
Virginia	14,191,774	10,156,312	2,539,078	490,666	1,005,718
Washington	9,223,895	6,601,060	1,650,265	318,907	653,663
West Virginia	5,391,653	3,858,524	964,632	186,411	382,086
Wisconsin	12,943,449	9,262,951	2,315,737	447,507	917,254
Wyoming	1,224,782	876,513	219,128	42,345	86,796

Table 7.13
Allocation of Federal (VEA) funds, by legislative section and by State or outlying area: Fiscal year 1978 -- continued

State or outlying area	Total	120 Basic grants	130 Program improvements and supportive services	140 Special programs for disadvantaged	150 Consumer homemaking education
Outlying area:					
American Samoa	200,000	143,130	35,782	6,915	14,173
Commonwealth of Northern Marianas	150,000	107,348	26,837	5,186	10,629
Guam	0	0	0	0	0
Puerto Rico	10,027,984	7,176,505	1,794,126	346,707	710,646
Trust Territory of the Pacific Islands	286,940	205,348	51,337	9,921	20,334
Virgin Islands	227,473	162,791	40,697	7,865	16,120

SOURCE: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Report, 1978.

TABLE 7.14 -- OUTLAYS FOR VOCATIONAL EDUCATION (VEA) SECTION 110 PROGRAMS, BY AUTHORIZATION YEAR AND SOURCE OF FUNDS, AND BY PROGRAM: SCHOOL YEAR 1978-79

PROGRAM	FISCAL YEAR 1979 TOTAL	FISCAL YEAR 1979 NON-FEDERAL	FISCAL YEAR 1979 FEDERAL	FISCAL YEAR 1978 TOTAL	FISCAL YEAR 1978 NON-FEDERAL	FISCAL YEAR 1978 FEDERAL
HANDICAPPED	141,174,876	104,726,606	36,448,270	33,128,948	16,436,761	16,692,187
DISADVANTAGED	356,280,891	288,279,148	68,001,743	60,712,194	23,759,543	36,952,651
LIMITED ENGLISH PROFICIENCY	19,754,305	16,737,711	3,016,594	1,526,318	663,920	862,398
ADULT AND POSTSECONDARY	1,615,586,755	1,518,197,598	97,389,157	523,919,928	488,219,565	35,700,363
SECTION TOTAL	$2,132,796,827	$1,927,941,063	$204,855,764	$619,287,388	$529,079,789	$90,207,599

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.15 -- OUTLAYS FOR PROGRAMS FOR HANDICAPPED ENROLLEES UNDER (VEA) SECTION 110, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	1,324,195	730,758	593,437	44.8	1.23
ALASKA	410,863	266,383	144,480	35.2	1.84
ARIZONA	1,689,419	1,111,192	578,227	34.2	1.92
ARKANSAS	1,568,671	833,048	735,623	46.9	1.13
CALIFORNIA	24,463,058	17,669,975	6,793,083	27.8	2.60
COLORADO	3,005,369	2,319,196	686,173	22.8	3.38
CONNECTICUT	2,844,797	2,091,145	753,652	26.5	2.77
DELAWARE	2,015,158	1,878,864	136,294	6.8	13.79
DISTRICT OF COLUMBIA	352,513	204,926	147,587	41.9	1.39
FLORIDA	9,838,010	8,194,690	1,643,320	16.7	4.99
GEORGIA	3,184,554	1,729,455	1,455,099	45.7	1.19
HAWAII	496,652	331,762	164,890	33.2	2.01
IDAHO	540,640	298,411	242,229	44.8	1.23
ILLINOIS	16,705,867	15,169,873	1,535,994	9.2	9.88
INDIANA	3,247,625	1,798,088	1,449,537	44.6	1.24
IOWA	1,957,128	1,211,846	745,282	38.1	1.63
KANSAS	864,147	464,559	399,588	46.2	1.16
KENTUCKY	1,926,201	1,086,771	839,430	43.6	1.29
LOUISIANA	1,297,059	593,899	703,160	54.2	0.84
MAINE	853,406	557,272	296,134	34.7	1.88
MARYLAND	4,861,920	3,373,320	1,488,600	30.6	2.27
MASSACHUSETTS	7,141,410	5,909,324	1,232,086	17.3	4.80
MICHIGAN	4,975,395	3,201,662	1,773,733	35.7	1.81
MINNESOTA	3,103,893	2,078,750	1,025,143	33.0	2.03
MISSISSIPPI	1,697,936	973,126	724,810	42.7	1.34
MISSOURI	3,250,736	1,830,652	1,420,084	43.7	1.29
MONTANA	0	0	0	*	*
NEBRASKA	612,691	330,051	282,640	46.1	1.17
NEVADA	642,902	499,876	143,026	22.2	3.50
NEW HAMPSHIRE	401,555	210,750	190,805	47.5	1.10
NEW JERSEY	3,792,519	2,335,994	1,456,525	38.4	1.60
NEW MEXICO	1,406,040	985,002	421,038	29.9	2.34
NEW YORK	12,918,324	8,848,284	4,070,040	31.5	2.17
NORTH CAROLINA	3,289,427	1,639,178	1,650,249	50.2	0.99
NORTH DAKOTA	377,204	206,406	170,798	45.3	1.21
OHIO	6,233,476	2,975,928	3,257,548	52.3	0.91
OKLAHOMA	1,852,349	1,112,117	740,232	40.0	1.50
OREGON	706,527	292,621	413,906	58.6	0.71
PENNSYLVANIA	6,161,600	3,602,221	2,559,379	41.5	1.41
RHODE ISLAND	4,085,476	3,800,114	285,362	7.0	13.32
SOUTH CAROLINA	1,787,418	962,106	825,312	46.2	1.17
SOUTH DAKOTA	303,691	172,070	131,621	43.3	1.31
TENNESSEE	3,498,808	2,120,128	1,378,680	39.4	1.54
TEXAS	5,390,182	3,518,577	1,871,605	34.7	1.88
UTAH	841,721	450,764	390,957	46.4	1.15
VERMONT	1,256,060	1,141,705	114,355	9.1	9.98
VIRGINIA	4,157,862	3,135,038	1,022,824	24.6	3.07
WASHINGTON	3,282,326	2,021,897	1,260,429	38.4	1.60
WEST VIRGINIA	1,514,634	892,110	622,524	41.1	1.43
WISCONSIN	4,477,587	3,229,965	1,247,622	27.9	2.59
WYOMING	161,822	80,911	80,911	50.0	1.00
TOTAL U.S.	$172,768,831	$120,472,768	$52,296,063	30.3	2.30
AMERICAN SAMOA	5,833	0	5,833	100.0	0.00
GUAM	20,661	0	20,661	100.0	0.00
PUERTO RICO	1,500,499	690,599	809,900	54.0	0.85
TRUST TERRITORY	0	0	0	*	*
VIRGIN ISLANDS	0	0	0	*	*
OUTLYING AREAS	$1,534,993	$690,599	$844,394	55.0	0.82
U.S. & OUTLYING AREAS	$174,303,824	$121,163,367	$53,140,457	30.5	2.28

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.16 -- OUTLAYS FOR PROGRAMS FOR DISADVANTAGED ENROLLEES UNDER (VEA) SECTION 110, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1976-77 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	OUTLAYS NON-FEDERAL	OUTLAYS FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	3,283,743	1,830,401	1,453,342	44.3	1.26
ALASKA	423,305	235,006	188,299	44.5	1.25
ARIZONA	1,882,856	1,040,652	842,204	44.7	1.24
ARKANSAS	2,604,735	1,345,629	1,259,106	48.3	1.07
CALIFORNIA	30,893,198	18,589,583	12,303,615	39.8	1.51
COLORADO	3,609,471	2,304,133	1,305,338	36.2	1.77
CONNECTICUT	3,292,305	1,931,526	1,360,779	41.3	1.42
DELAWARE	4,780,414	4,516,857	263,557	5.5	17.14
DISTRICT OF COLUMBIA	686,567	417,000	269,567	39.3	1.55
FLORIDA	33,110,352	30,342,736	2,767,616	8.4	10.96
GEORGIA	4,833,490	2,627,753	2,205,737	45.6	1.19
HAWAII	1,178,521	775,409	403,112	34.2	1.92
IDAHO	818,176	446,779	371,397	45.4	1.20
ILLINOIS	29,347,913	21,705,861	7,642,052	26.0	2.84
INDIANA	5,273,900	2,956,303	2,317,597	43.9	1.28
IOWA	3,275,946	1,946,436	1,329,510	40.6	1.46
KANSAS	1,093,057	574,916	518,141	47.4	1.11
KENTUCKY	3,669,691	1,918,459	1,751,232	47.7	1.10
LOUISIANA	5,744,057	3,779,825	1,964,232	34.2	1.92
MAINE	1,307,383	800,164	507,219	38.8	1.58
MARYLAND	9,524,609	6,776,335	2,748,274	28.9	2.47
MASSACHUSETTS	4,982,047	2,575,176	2,406,871	48.3	1.07
MICHIGAN	11,658,755	7,362,022	4,296,733	36.9	1.71
MINNESOTA	4,537,973	2,724,487	1,813,486	40.0	1.50
MISSISSIPPI	2,985,026	1,687,216	1,297,810	43.5	1.30
MISSOURI	3,895,836	1,929,671	1,966,165	50.5	0.98
MONTANA	0	0	0	.	.
NEBRASKA	1,432,268	742,865	689,403	48.1	1.08
NEVADA	1,034,650	781,033	253,617	24.5	3.08
NEW HAMPSHIRE	750,443	374,600	375,843	50.1	1.00
NEW JERSEY	8,569,112	5,884,417	2,684,695	31.3	2.19
NEW MEXICO	8,091,403	7,505,036	586,367	7.2	12.80
NEW YORK	83,048,050	76,570,171	6,477,879	7.8	11.82
NORTH CAROLINA	5,867,813	2,934,984	2,932,829	50.0	1.00
NORTH DAKOTA	686,080	365,660	320,420	46.7	1.14
OHIO	46,753,082	40,398,296	6,354,786	13.6	6.36
OKLAHOMA	3,575,248	2,104,326	1,470,922	41.1	1.43
OREGON	1,442,274	599,626	842,648	58.4	0.71
PENNSYLVANIA	10,469,243	6,530,125	3,939,118	37.6	1.66
RHODE ISLAND	2,830,356	2,375,146	455,210	16.1	5.22
SOUTH CAROLINA	2,493,484	1,248,794	1,244,690	49.9	1.00
SOUTH DAKOTA	895,889	475,420	420,469	46.9	1.13
TENNESSEE	7,048,101	3,935,808	3,112,293	44.2	1.26
TEXAS	21,802,722	15,610,520	6,192,202	28.4	2.52
UTAH	908,553	80,729	827,824	91.1	0.10
VERMONT	541,861	413,540	128,321	23.7	3.22
VIRGINIA	4,867,190	2,627,904	2,239,286	46.0	1.17
WASHINGTON	4,732,079	2,398,260	2,333,819	49.3	1.03
WEST VIRGINIA	2,063,980	901,878	1,162,102	56.3	0.78
WISCONSIN	12,753,038	10,802,033	1,951,005	15.3	5.54
WYOMING	282,562	141,281	141,281	50.0	1.00
TOTAL U.S.	$411,632,807	$308,942,787	$102,690,020	24.9	3.01
AMERICAN SAMOA	17,335	0	17,335	100.0	0.00
GUAM	40,987	0	40,987	100.0	0.00
PUERTO RICO	5,301,956	3,095,904	2,206,052	41.6	1.40
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$5,360,278	$3,095,904	$2,264,374	42.2	1.37
U.S. & OUTLYING AREAS	$416,993,085	$312,038,691	$104,954,394	25.2	2.97

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.17 -- OUTLAYS FOR PROGRAMS FOR ENROLLEES WITH LIMITED ENGLISH PROFICIENCY UNDER (VEA) SECTION 110, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	374	0	374	100.0	0.00
ALASKA	32,839	13,839	19,000	57.9	0.73
ARIZONA	509,973	308,974	200,999	39.4	1.54
ARKANSAS	29,046	19,943	9,103	31.3	2.19
CALIFORNIA	2,749,630	2,301,437	448,193	16.3	5.13
COLORADO	66,637	0	66,637	100.0	0.00
CONNECTICUT	18,308	0	18,308	100.0	0.00
DELAWARE	96,000	60,000	36,000	37.5	1.67
DISTRICT OF COLUMBIA	24,893	0	24,893	100.0	0.00
FLORIDA	612,849	392,565	220,284	35.9	1.78
GEORGIA	5,503	0	5,503	100.0	0.00
HAWAII	0	0	0	.	.
IDAHO	23,302	0	23,302	100.0	0.00
ILLINOIS	1,287,656	1,013,188	274,468	21.3	3.69
INDIANA	43,834	8,079	35,755	81.6	0.23
IOWA	62,505	29,812	32,693	52.3	0.91
KANSAS	48,939	7,202	41,737	85.3	0.17
KENTUCKY	14,343	0	14,343	100.0	0.00
LOUISIANA	23,603	0	23,603	100.0	0.00
MAINE	0	0	0	.	.
MARYLAND	22,661	0	22,661	100.0	0.00
MASSACHUSETTS	880,221	868,904	11,317	1.3	76.78
MICHIGAN	248,186	22,174	226,012	91.1	0.10
MINNESOTA	414,000	207,000	207,000	50.0	1.00
MISSISSIPPI	0	0	0	.	.
MISSOURI	18,400	0	18,400	100.0	0.00
MONTANA	0	0	0	.	.
NEBRASKA	11,728	0	11,728	100.0	0.00
NEVADA	56,555	53,196	3,359	5.9	15.84
NEW HAMPSHIRE	46,000	46,000	0	0.0	.
NEW JERSEY	175,484	48,593	126,891	72.3	0.38
NEW MEXICO	197,624	0	197,624	100.0	0.00
NEW YORK	11,411,997	10,441,387	970,610	8.5	10.76
NORTH CAROLINA	16,868	8,434	8,434	50.0	1.00
NORTH DAKOTA	10,990	6,007	4,983	45.3	1.21
OHIO	99,158	17,862	81,296	82.0	0.22
OKLAHOMA	515	103	412	80.0	0.25
OREGON	6,743	0	6,743	100.0	0.00
PENNSYLVANIA	100,025	61,183	38,842	38.8	1.58
RHODE ISLAND	253,918	225,792	28,126	11.1	8.03
SOUTH CAROLINA	0	0	0	.	.
SOUTH DAKOTA	0	0	0	.	.
TENNESSEE	2,976	1,488	1,488	50.0	1.00
TEXAS	0	0	0	.	.
UTAH	218,924	90,413	128,511	58.7	0.70
VERMONT	0	0	0	.	.
VIRGINIA	32,588	6,067	26,521	81.4	0.23
WASHINGTON	321,887	314,089	7,798	2.4	40.28
WEST VIRGINIA	384	192	192	50.0	1.00
WISCONSIN	877,230	727,708	149,522	17.0	4.87
WYOMING	0	0	0	.	.
TOTAL U.S.	$21,075,294	$17,301,631	$3,773,663	17.9	4.58
AMERICAN SAMOA	5,329	0	5,329	100.0	0.00
GUAM	0	0	0	.	.
PUERTO RICO	200,000	100,000	100,000	50.0	1.00
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$205,329	$100,000	$105,329	51.3	0.95
U.S. & OUTLYING AREAS	$21,280,623	$17,401,631	$3,878,992	18.2	4.49

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.18 -- OUTLAYS FOR ADULT AND POSTSECONDARY EDUCATION UNDER (VEA) SECTION 110, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	24,491,993	23,021,641	1,470,352	6.0	15.66
ALASKA	365,364	169,202	196,162	53.7	0.86
ARIZONA	14,832,215	13,765,330	1,066,885	7.2	12.90
ARKANSAS	14,269,002	12,587,335	1,681,667	11.8	7.49
CALIFORNIA	453,544,852	433,974,230	19,570,622	4.3	22.17
COLORADO	26,717,158	22,507,428	4,209,730	15.8	5.35
CONNECTICUT	12,876,244	11,822,146	1,054,098	8.2	11.22
DELAWARE	24,490,075	24,292,573	197,502	0.8	123.00
DISTRICT OF COLUMBIA	857,564	634,905	222,659	26.0	2.85
FLORIDA	123,752,304	120,677,904	3,074,400	2.5	39.25
GEORGIA	40,938,732	36,096,142	4,842,590	11.8	7.45
HAWAII	6,818,713	6,300,591	518,122	7.6	12.16
IDAHO	8,163,984	7,530,099	633,885	7.8	11.88
ILLINOIS	119,919,773	112,869,990	7,049,783	5.9	16.01
INDIANA	38,583,605	36,333,254	2,250,351	5.8	16.15
IOWA	51,779,992	47,291,999	4,487,993	8.7	10.54
KANSAS	20,233,265	18,386,762	1,846,503	9.1	9.96
KENTUCKY	14,420,482	12,416,459	2,004,023	13.9	6.20
LOUISIANA	29,275,956	25,335,481	3,940,475	13.5	6.43
MAINE	9,744,513	8,097,644	1,646,869	16.9	4.92
MARYLAND	38,068,834	35,804,422	2,264,412	5.9	15.81
MASSACHUSETTS	38,377,478	36,811,963	1,565,515	4.1	23.51
MICHIGAN	86,027,686	81,559,273	4,468,413	5.2	18.25
MINNESOTA	64,522,171	59,962,000	4,560,171	7.1	13.15
MISSISSIPPI	14,849,225	13,761,305	1,087,920	7.3	12.65
MISSOURI	17,393,105	14,977,107	2,415,998	13.9	6.20
MONTANA	0	0	0	.	.
NEBRASKA	12,195,912	11,525,101	670,811	5.5	17.18
NEVADA	3,266,386	3,068,650	197,736	6.1	15.52
NEW HAMPSHIRE	579,585	316,200	263,385	45.4	1.20
NEW JERSEY	68,692,740	66,427,573	2,265,167	3.3	29.33
NEW MEXICO	8,652,907	6,932,619	1,720,288	19.9	4.03
NEW YORK	89,299,400	82,824,160	6,475,240	7.3	12.79
NORTH CAROLINA	121,369,119	119,014,404	2,354,715	1.9	50.54
NORTH DAKOTA	5,939,963	5,215,416	724,547	12.2	7.20
OHIO	38,325,187	32,790,237	5,534,950	14.4	5.92
OKLAHOMA	42,802,632	40,912,759	1,889,873	4.4	21.65
OREGON	11,622,380	10,471,412	1,150,968	9.9	9.10
PENNSYLVANIA	17,916,557	14,535,820	3,380,737	18.9	4.30
RHODE ISLAND	3,738,640	3,411,401	327,239	8.8	10.42
SOUTH CAROLINA	61,058,687	59,591,951	1,466,736	2.4	40.63
SOUTH DAKOTA	3,308,249	2,584,626	723,623	21.9	3.57
TENNESSEE	27,046,531	24,230,762	2,815,769	10.4	8.61
TEXAS	65,264,181	57,060,821	8,203,360	12.6	6.96
UTAH	14,226,880	12,987,738	1,239,142	8.7	10.48
VERMONT	520,452	291,767	228,685	43.9	1.28
VIRGINIA	29,549,965	27,804,606	1,745,359	5.9	15.93
WASHINGTON	88,227,871	84,284,722	3,943,149	4.5	21.37
WEST VIRGINIA	2,896,120	1,822,184	1,073,936	37.1	1.70
WISCONSIN	121,256,148	116,837,515	4,418,633	3.6	26.44
WYOMING	1,491,269	1,332,929	158,340	10.6	8.42
TOTAL U.S.	$2,134,562,046	$2,003,262,558	$131,299,488	6.2	15.26
AMERICAN SAMOA	29,406	0	29,406	100.0	0.00
GUAM	8,858	0	8,858	100.0	0.00
PUERTO RICO	4,906,373	3,154,605	1,751,768	35.7	1.80
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$4,944,637	$3,154,605	$1,790,032	36.2	1.76
U.S. & OUTLYING AREAS	$2,139,506,683	$2,006,417,163	$133,089,520	6.2	15.08

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.19 -- OUTLAYS FOR VOCATIONAL EDUCATION (VEA) SECTION 120 PROGRAMS, BY AUTHORIZATION YEAR AND SOURCE OF FUNDS, AND BY PROGRAM: SCHOOL YEAR 1978-79

PROGRAM	FISCAL YEAR 1979 TOTAL	 NON-FEDERAL	 FEDERAL	FISCAL YEAR 1978 TOTAL	 NON-FEDERAL	 FEDERAL
VOCATIONAL EDUCATION PROGRAMS	4,447,837,571	4,215,223,836	232,613,735	386,977,891	293,117,325	93,860,566
WORK STUDY PROGRAMS	19,992,338	16,238,651	3,753,687	2,257,907	497,900	1,760,007
COOPERATIVE EDUCATION PROGRAMS	110,970,152	104,588,058	6,382,094	4,041,815	2,168,146	1,873,669
ENERGY EDUCATION PROGRAMS	1,625,111	1,304,138	320,973	24,083	219	23,864
CONSTRUCTION	135,762,507	129,426,426	6,336,081	27,607,540	21,721,472	5,886,068
FULL-TIME SEX EQUITY PERSONNEL	3,313,568	1,659,811	1,653,757	1,062,467	3,017	1,059,450
1/STIPENDS	153,726	0	153,726	422,578	0	422,578
PLACEMENT SERVICES	10,286,306	9,701,377	584,929	187,176	176,159	11,017
INDUSTRIAL ARTS	89,485,374	87,702,518	1,782,856	40,978,537	39,375,464	1,603,073
SUPPORT SERVICES FOR WOMEN	591,501	256,436	335,065	295,591	60,436	235,155
DAY CARE SERVICES	784,045	614,974	169,071	187,300	107,041	80,259
VOCED FOR DISPLACED HOMEMAKERS	10,820,821	9,457,274	1,363,547	973,730	499,137	474,593
2/RESIDENTIAL SCHOOLS	3,877,321	3,175,442	701,879	252,469	93,117	159,352
CONTRACTED SERVICES	3,215,951	3,016,087	199,864	70,536	59,052	11,484
STATE ADMINISTRATION	72,043,480	41,245,824	30,797,656	5,605,076	2,193,262	3,411,814
LOCAL ADMINISTRATION	223,444,947	218,485,269	4,959,678	14,751,602	13,600,660	1,150,942
SECTION TOTAL	$5,134,204,719	$4,842,096,121	$292,108,598	$485,696,298	$373,672,407	$112,023,891

NOTE: NO SUBSECTION TABLE FOR THE FOLLOWING:
1/ STIPENDS--OHIO ONLY;
2/ RESIDENTIAL SCHOOLS--GEORGIA, KENTUCKY, AND PUERTO RICO ONLY.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.20 -- OUTLAYS FOR VOCATIONAL EDUCATION PROGRAMS UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	48,992,979	43,148,609	5,844,370	11.9	7.38
ALASKA	11,257,647	10,487,973	769,674	6.8	13.63
ARIZONA	28,855,276	25,727,042	3,128,234	10.8	8.22
ARKANSAS	21,469,587	18,004,104	3,465,483	16.1	5.20
CALIFORNIA	767,593,531	723,082,296	44,511,235	5.8	16.24
COLORADO	58,115,436	54,612,628	3,502,808	6.0	15.59
CONNECTICUT	40,520,871	36,795,881	3,724,990	9.2	9.88
DELAWARE	29,013,201	28,244,441	768,760	2.6	36.74
DISTRICT OF COLUMBIA	4,292,581	3,602,313	690,268	16.1	5.22
FLORIDA	241,335,356	232,007,308	9,328,048	3.9	24.87
GEORGIA	65,977,584	57,935,649	8,041,935	12.2	7.20
HAWAII	10,847,848	9,829,717	1,018,131	9.4	9.65
IDAHO	10,621,288	8,805,712	1,815,576	17.1	4.85
ILLINOIS	336,112,812	325,797,402	10,315,410	3.1	31.58
INDIANA	64,747,527	56,270,572	8,476,955	13.1	6.64
IOWA	61,336,963	56,380,880	4,956,083	8.1	11.38
KANSAS	32,383,406	29,186,297	3,197,109	9.9	9.13
KENTUCKY	59,830,296	53,035,339	6,794,957	11.4	7.81
LOUISIANA	46,455,802	39,014,396	7,441,406	16.0	5.24
MAINE	19,988,256	17,985,278	2,002,978	10.0	8.98
MARYLAND	90,311,971	81,087,253	9,224,718	10.2	8.79
MASSACHUSETTS	166,660,205	159,214,614	7,445,591	4.5	21.38
MICHIGAN	170,920,552	164,037,817	6,882,735	4.0	23.83
MINNESOTA	96,004,203	89,000,000	7,004,203	7.3	12.71
MISSISSIPPI	25,718,982	22,994,235	2,724,747	10.6	8.44
MISSOURI	55,881,380	47,578,507	8,302,873	14.9	5.73
MONTANA	0	0	0	.	.
NEBRASKA	19,413,811	16,856,514	2,557,2[illegible]	13.2	6.59
NEVADA	10,371,164	9,595,463	77[illegible]	7.5	12.37
NEW HAMPSHIRE	7,907,100	6,952,040	95[illegible]0	12.1	7.28
NEW JERSEY	145,085,949	137,581,298	7,504,651	5.2	18.33
NEW MEXICO	24,243,651	21,633,351	2,610,300	10.8	8.29
NEW YORK	522,362,624	500,150,426	22,212,198	4.3	22.52
NORTH CAROLINA	175,756,149	163,851,371	11,904,778	6.8	13.76
NORTH DAKOTA	11,491,189	10,392,035	1,099,154	9.6	9.45
OHIO	230,313,496	212,678,737	17,634,759	7.7	12.06
OKLAHOMA	70,624,289	65,939,809	4,684,480	6.6	14.08
OREGON	17,687,979	13,914,031	3,773,948	21.3	3.69
PENNSYLVANIA	250,224,145	236,958,606	13,265,539	5.3	17.86
RHODE ISLAND	17,484,046	16,275,633	1,208,413	6.9	13.47
SOUTH CAROLINA	90,516,811	84,591,506	5,925,305	6.5	14.28
SOUTH DAKOTA	6,211,496	5,054,644	1,156,852	18.6	4.37
TENNESSEE	79,819,292	72,019,759	7,799,533	9.8	9.23
TEXAS	184,124,193	165,369,605	18,754,588	10.2	8.82
UTAH	39,200,087	36,173,799	3,026,288	7.7	11.95
VERMONT	7,754,393	6,789,170	965,223	12.4	7.03
VIRGINIA	96,557,858	90,636,426	5,921,432	6.1	15.31
WASHINGTON	122,824,340	116,499,600	6,324,740	5.1	18.42
WEST VIRGINIA	25,206,802	22,188,319	3,018,483	12.0	7.35
WISCONSIN	91,094,753	85,955,925	5,138,828	5.6	16.73
WYOMING	3,674,156	3,184,886	489,270	13.3	6.51
TOTAL U.S.	$4,815,195,313	$4,495,109,216	$320,086,097	6.6	14.04
AMERICAN SAMOA	469,260	381,300	87,960	18.7	4.33
GUAM	110,789	0	110,789	100.0	0.00
PUERTO RICO	19,040,100	12,850,645	6,189,455	32.5	2.08
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$19,620,149	$13,231,945	$6,388,204	32.6	2.07
U.S. & OUTLYING AREAS	$4,834,815,462	$4,508,341,161	$326,474,301	6.8	13.81

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.21 -- OUTLAYS FOR WORK STUDY UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	OUTLAYS NON-FEDERAL	OUTLAYS FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	15,118	0	15,118	100.0	0.00
ALASKA	0	0	0	.	.
ARIZONA	211,945	176,918	35,027	16.5	5.05
ARKANSAS	0	0	0	.	.
CALIFORNIA	884,572	575,192	309,380	35.0	1.86
COLORADO	139,085	67,524	71,561	51.5	0.94
CONNECTICUT	0	0	0	.	.
DELAWARE	43,728	25,000	18,728	42.8	1.33
DISTRICT OF COLUMBIA	21,001	15,900	5,101	24.3	3.12
FLORIDA	589,947	262,639	327,308	55.5	0.80
GEORGIA	0	0	0	.	.
HAWAII	68,744	37,768	30,976	45.1	1.22
IDAHO	43,608	9,357	34,251	78.5	0.27
ILLINOIS	861,638	304,620	557,018	64.6	0.55
INDIANA	552,836	276,419	276,417	50.0	1.00
IOWA	0	0	0	.	.
KANSAS	36,141	18,070	18,071	50.0	1.00
KENTUCKY	327,340	65,929	261,411	79.9	0.25
LOUISIANA	197,088	0	197,088	100.0	0.00
MAINE	0	0	0	.	.
MARYLAND	213,838	13,832	200,006	93.5	0.07
MASSACHUSETTS	0	0	0	.	.
MICHIGAN	0	0	0	.	.
MINNESOTA	0	0	0	.	.
MISSISSIPPI	0	0	0	.	.
MISSOURI	152,176	65,771	86,405	56.8	0.76
MONTANA	0	0	0	.	.
NEBRASKA	46,723	22,954	23,769	50.9	0.97
NEVADA	38,698	18,698	20,000	51.7	0.93
NEW HAMPSHIRE	315	63	252	80.0	0.25
NEW JERSEY	1,719,384	1,359,070	360,314	21.0	3.77
NEW MEXICO	2,105	0	2,105	100.0	0.00
NEW YORK	11,713,821	11,337,063	376,758	3.2	30.09
NORTH CAROLINA	239,607	74,404	165,203	68.9	0.45
NORTH DAKOTA	63,653	21,679	41,974	65.9	0.52
OHIO	422,850	84,570	338,280	80.0	0.25
OKLAHOMA	121,101	105,187	15,914	13.1	6.61
OREGON	2,167	0	2,167	100.0	0.00
PENNSYLVANIA	401,565	164,216	237,349	59.1	0.69
RHODE ISLAND	336,096	323,027	13,069	3.9	24.72
SOUTH CAROLINA	51,608	27,122	24,486	47.4	1.11
SOUTH DAKOTA	18,099	9,049	9,050	50.0	1.00
TENNESSEE	341,128	341,128	0	0.0	.
TEXAS	990,900	60,147	930,753	93.9	0.06
UTAH	0	0	0	.	.
VERMONT	0	0	0	.	.
VIRGINIA	310,403	83,241	227,162	73.2	0.37
WASHINGTON	177,771	57,725	120,046	67.5	0.48
WEST VIRGINIA	196,118	115,704	80,414	41.0	1.44
WISCONSIN	625,602	584,727	40,875	6.5	14.31
WYOMING	0	0	0	.	.
TOTAL U.S.	$22,170,519	$16,704,713	$5,473,806	24.7	3.05
AMERICAN SAMOA	5,513	3,000	2,513	45.6	1.19
GUAM	12,075	0	12,075	100.0	0.00
PUERTO RICO	54,138	28,838	25,300	46.7	1.14
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$71,726	$31,838	$39,888	55.6	0.80
U.S. & OUTLYING AREAS	$22,250,245	$16,736,551	$5,513,694	24.8	3.04

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.22 -- OUTLAYS FOR COOPERATIVE EDUCATION PROGRAMS UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	OUTLAYS NON-FEDERAL	OUTLAYS FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	4,352,691	4,056,925	295,766	6.8	13.72
ALASKA	0	0	0	*	*
ARIZONA	1,920,389	1,417,833	502,556	26.2	2.82
ARKANSAS	2,891,734	2,500,128	391,606	13.5	6.38
CALIFORNIA	3,930,313	3,725,993	204,320	5.2	18.24
COLORADO	597,895	333,014	264,881	44.3	1.26
CONNECTICUT	2,804,147	2,378,570	425,577	15.2	5.59
DELAWARE	0	0	0	*	*
DISTRICT OF COLUMBIA	303,771	159,390	144,381	47.5	1.10
FLORIDA	26,507,033	26,187,406	319,627	1.2	81.93
GEORGIA	13,409,903	12,672,039	737,864	5.5	17.17
HAWAII	318,998	111,710	207,288	65.0	0.54
IDAHO	648,969	524,992	123,977	19.1	4.23
ILLINOIS	33,616	14,548	19,068	56.7	0.76
INDIANA	0	0	0	*	*
IOWA	0	0	0	*	*
KANSAS	289,615	146,888	142,727	49.3	1.03
KENTUCKY	577,621	116,674	460,947	79.8	0.25
LOUISIANA	1,243,847	866,514	377,333	30.3	2.30
MAINE	0	0	0	*	*
MARYLAND	0	0	0	*	*
MASSACHUSETTS	3,316,240	3,070,366	245,874	7.4	12.49
MICHIGAN	0	0	0	*	*
MINNESOTA	0	0	0	*	*
MISSISSIPPI	1,651,282	1,516,688	134,594	8.2	11.27
MISSOURI	0	0	0	*	*
MONTANA	0	0	0	*	*
NEBRASKA	100,544	48,954	51,590	51.3	0.95
NEVADA	501,131	406,914	94,217	18.8	4.32
NEW HAMPSHIRE	275,475	122,441	153,034	55.6	0.80
NEW JERSEY	5,166,844	5,027,833	139,011	2.7	35.96
NEW MEXICO	0	0	0	*	*
NEW YORK	8,924,016	8,628,091	295,925	3.3	29.16
NORTH CAROLINA	0	0	0	*	*
NORTH DAKOTA	7,748	4,146	3,602	46.5	1.15
OHIO	25,705,020	25,284,078	420,942	1.6	60.07
OKLAHOMA	2,963,753	2,793,332	170,421	5.8	16.39
OREGON	477,251	446,597	30,654	6.4	14.57
PENNSYLVANIA	1,046,405	640,936	405,469	38.7	1.58
RHODE ISLAND	465,291	402,690	62,601	13.5	6.43
SOUTH CAROLINA	254,034	71,101	182,933	72.0	0.39
SOUTH DAKOTA	590,027	549,737	40,290	6.8	13.64
TENNESSEE	821,383	788,342	33,041	4.0	23.86
TEXAS	0	0	0	*	*
UTAH	0	0	0	*	*
VERMONT	380,702	380,702	0	0.0	*
VIRGINIA	274,331	132,373	141,958	51.7	0.93
WASHINGTON	423,304	44,960	378,344	89.4	0.12
WEST VIRGINIA	1,481,248	1,174,999	306,249	20.7	[illegible].84
WISCONSIN	0	0	0	*	*
WYOMING	0	0	0	*	*
TOTAL U.S.	$114,658,171	$106,748,704	$7,909,467	6.9	13.50
AMERICAN SAMOA	21,000	7,500	13,500	64.3	0.56
GUAM	0	0	0	*	*
PUERTO RICO	332,796	0	332,796	100.0	0.00
TRUST TERRITORY	0	0	0	*	*
VIRGIN ISLANDS	0	0	0	*	*
OUTLYING AREAS	$353,796	$7,500	$346,296	97.9	0.02
U.S. & OUTLYING AREAS	$115,011,967	$106,756,204	$8,255,763	7.2	12.93

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.23 -- OUTLAYS FOR ENERGY EDUCATION PROGRAMS UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	 NON-FEDERAL	 FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	0	0	0	.	.
ALASKA	0	0	0	.	.
ARIZONA	37,500	12,500	25,000	66.7	0.50
ARKANSAS	3,684	1,227	2,457	66.7	0.50
CALIFORNIA	0	0	0	.	.
COLORADO	156,171	38,487	117,684	75.4	0.33
CONNECTICUT	0	0	0	.	.
DELAWARE	3,000	0	3,000	100.0	0.00
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	88,966	88,766	200	0.2	443.83
GEORGIA	0	0	0	.	.
HAWAII	0	0	0	.	.
IDAHO	0	0	0	.	.
ILLINOIS	0	0	0	.	.
INDIANA	0	0	0	.	.
IOWA	0	0	0	.	.
KANSAS	0	0	0	.	.
KENTUCKY	24,590	0	24,590	100.0	0.00
LOUISIANA	0	0	0	.	.
MAINE	0	0	0	.	.
MARYLAND	0	0	0	.	.
MASSACHUSETTS	0	0	0	.	.
MICHIGAN	0	0	0	.	.
MINNESOTA	0	0	0	.	.
MISSISSIPPI	0	0	0	.	.
MISSOURI	0	0	0	.	.
MONTANA	0	0	0	.	.
NEBRASKA	0	0	0	.	.
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	98,471	1,344	97,127	98.6	0.01
NEW MEXICO	0	0	0	.	.
NEW YORK	1,115,602	1,079,713	35,889	3.2	30.08
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	74,343	74,343	0	0.0	.
OHIO	18,977	7,977	11,000	58.0	0.73
OKLAHOMA	0	0	0	.	.
OREGON	10,477	0	10,477	100.0	0.00
PENNSYLVANIA	0	0	0	.	.
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	3,554	0	3,554	100.0	0.00
SOUTH DAKOTA	0	0	0	.	.
TENNESSEE	0	0	0	.	.
TEXAS	0	0	0	.	.
UTAH	0	0	0	.	.
VERMONT	0	0	0	.	.
VIRGINIA	0	0	0	.	.
WASHINGTON	0	0	0	.	.
WEST VIRGINIA	0	0	0	.	.
WISCONSIN	13,859	0	13,859	100.0	0.00
WYOMING	0	0	0	.	.
TOTAL U.S.	$1,649,194	$1,304,357	$344,837	20.9	3.78
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	0	0	0	.	.
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$0	$0	$0	.	.
U.S. & OUTLYING AREAS	$1,649,194	$1,304,357	$344,837	20.9	3.78

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.24 -- OUTLAYS FOR CONSTRUCTION UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	1,699,352	1,217,232	482,120	28.4	2.52
ALASKA	0	0	0	.	.
ARIZONA	0	0	0	.	.
ARKANSAS	0	0	0	.	.
CALIFORNIA	0	0	0	.	.
COLORADO	435,538	310,208	125,330	28.8	2.48
CONNECTICUT	12,463,042	12,463,042	0	0.0	.
DELAWARE	0	0	0	.	.
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	34,985,527	34,985,527	0	0.0	.
GEORGIA	3,809,074	3,193,514	615,560	16.2	5.19
HAWAII	0	0	0	.	.
IDAHO	0	0	0	.	.
ILLINOIS	0	0	0	.	.
INDIANA	0	0	0	.	.
IOWA	0	0	0	.	.
KANSAS	0	0	0	.	.
KENTUCKY	1,156,146	1,156,146	0	0.0	.
LOUISIANA	0	0	0	.	.
MAINE	0	0	0	.	.
MARYLAND	0	0	0	.	.
MASSACHUSETTS	35,000,000	35,000,000	0	0.0	.
MICHIGAN	0	0	0	.	.
MINNESOTA	0	0	0	.	.
MISSISSIPPI	5,660,800	3,373,852	2,286,948	40.4	1.48
MISSOURI	1,400,000	1,400,000	0	0.0	.
MONTANA	0	0	0	.	.
NEBRASKA	0	0	0	.	.
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	4,196,442	2,098,221	2,098,221	50.0	1.00
NEW MEXICO	0	0	0	.	.
NEW YORK	231,803	0	231,803	100.0	0.00
NORTH CAROLINA	3,446,904	3,209,259	237,645	6.9	13.50
NORTH DAKOTA	0	0	0	.	.
OHIO	9,739,051	9,052,843	686,208	7.0	13.19
OKLAHOMA	230,319	203,519	26,800	11.6	7.59
OREGON	0	0	0	.	.
PENNSYLVANIA	11,558,476	10,992,528	565,948	4.9	19.42
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	4,019,485	4,019,485	0	0.0	.
SOUTH DAKOTA	0	0	0	.	.
TENNESSEE	800	800	0	0.0	.
TEXAS	0	0	0	.	.
UTAH	0	0	0	.	.
VERMONT	45,794	45,794	0	0.0	.
VIRGINIA	6,024,738	2,987,028	3,037,710	50.4	0.98
WASHINGTON	1,877,952	1,727,952	150,000	8.0	11.52
WEST VIRGINIA	649,041	649,041	0	0.0	.
WISCONSIN	24,739,763	23,061,907	1,677,856	6.8	13.74
WYOMING	0	0	0	.	.
TOTAL U.S.	$163,370,047	$151,147,898	$12,222,149	7.5	12.37
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	0	0	0	.	.
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$0	$0	$0	.	.
U.S. & OUTLYING AREAS	$163,370,047	$151,147,898	$12,222,149	7.5	12.37

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.25 -- OUTLAYS FOR FULL-TIME SEX EQUITY PERSONNEL UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	66,374	1,348	65,026	98.0	0.02
ALASKA	70,336	0	70,336	100.0	0.00
ARIZONA	30,829	0	30,829	100.0	0.00
ARKANSAS	62,657	1,995	60,662	96.8	0.03
CALIFORNIA	62,500	0	62,500	100.0	0.00
COLORADO	49,650	0	49,650	100.0	0.00
CONNECTICUT	50,920	0	50,920	100.0	0.00
DELAWARE	54,409	3,944	50,465	92.8	0.08
DISTRICT OF COLUMBIA	49,487	0	49,487	100.0	0.00
FLORIDA	39,723	0	39,723	100.0	0.00
GEORGIA	60,114	0	60,114	100.0	0.00
HAWAII	44,335	0	44,335	100.0	0.00
IDAHO	51,096	11,380	39,716	77.7	0.29
ILLINOIS	48,023	0	48,023	100.0	0.00
INDIANA	59,584	0	59,584	100.0	0.00
IOWA	56,737	0	56,737	100.0	0.00
KANSAS	45,713	2,942	42,771	93.6	0.07
KENTUCKY	41,665	0	41,665	100.0	0.00
LOUISIANA	75,200	0	75,200	100.0	0.00
MAINE	47,654	0	47,654	100.0	0.00
MARYLAND	47,926	0	47,926	100.0	0.00
MASSACHUSETTS	50,000	0	50,000	100.0	0.00
MICHIGAN	124,738	0	124,738	100.0	0.00
MINNESOTA	50,000	0	50,000	100.0	0.00
MISSISSIPPI	43,001	0	43,001	100.0	0.00
MISSOURI	64,496	0	64,496	100.0	0.00
MONTANA	0	0	0	.	.
NEBRASKA	45,120	0	45,120	100.0	0.00
NEVADA	50,000	0	50,000	100.0	0.00
NEW HAMPSHIRE	39,780	0	39,780	100.0	0.00
NEW JERSEY	50,000	0	50,000	100.0	0.00
NEW MEXICO	28,873	0	28,873	100.0	0.00
NEW YORK	1,673,403	1,623,403	50,000	3.0	32.47
NORTH CAROLINA	44,418	0	44,418	100.0	0.00
NORTH DAKOTA	45,560	8,417	37,143	81.5	0.23
OHIO	82,956	9,307	73,649	88.8	0.13
OKLAHOMA	57,548	92	57,456	99.8	0.00
OREGON	72,304	0	72,304	100.0	0.00
PENNSYLVANIA	26,197	0	26,197	100.0	0.00
RHODE ISLAND	36,552	0	36,552	100.0	0.00
SOUTH CAROLINA	47,213	0	47,213	100.0	0.00
SOUTH DAKOTA	48,494	0	48,494	100.0	0.00
TENNESSEE	45,447	0	45,447	100.0	0.00
TEXAS	67,784	0	67,784	100.0	0.00
UTAH	78,437	0	78,437	100.0	0.00
VERMONT	20,802	0	20,802	100.0	0.00
VIRGINIA	59,191	0	59,191	100.0	0.00
WASHINGTON	60,515	0	60,515	100.0	0.00
WEST VIRGINIA	46,710	0	46,710	100.0	0.00
WISCONSIN	105,394	0	105,394	100.0	0.00
WYOMING	57,890	0	57,890	100.0	0.00
TOTAL U.S.	$4,356,035	$1,662,828	$2,693,207	61.8	0.62
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	20,000	0	20,000	100.0	0.00
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$20,000	$0	$20,000	100.0	0.00
U.S. & OUTLYING AREAS	$4,376,035	$1,662,828	$2,713,207	62.0	0.61

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.24 -- OUTLAYS FOR PLACEMENT SERVICES UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	0	0	0	.	.
ALASKA	0	0	0	.	.
ARIZONA	13,022	1,752	11,270	86.5	0.16
ARKANSAS	0	0	0	.	.
CALIFORNIA	834,525	817,217	17,308	2.1	47.22
COLORADO	0	0	0	.	.
CONNECTICUT	0	0	0	.	.
DELAWARE	0	0	0	.	.
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	111,244	111,244	0	0.0	.
GEORGIA	0	0	0	.	.
HAWAII	0	0	0	.	.
IDAHO	0	0	0	.	.
ILLINOIS	0	0	0	.	.
INDIANA	0	0	0	.	.
IOWA	0	0	0	.	.
KANSAS	0	0	0	.	.
KENTUCKY	0	0	0	.	.
LOUISIANA	0	0	0	.	.
MAINE	0	0	0	.	.
MARYLAND	50,787	3,163	47,624	93.8	0.07
MASSACHUSETTS	0	0	0	.	.
MICHIGAN	0	0	0	.	.
MINNESOTA	0	0	0	.	.
MISSISSIPPI	0	0	0	.	.
MISSOURI	0	0	0	.	.
MONTANA	0	0	0	.	.
NEBRASKA	0	0	0	.	.
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	0	0	0	.	.
NEW MEXICO	0	0	0	.	.
NEW YORK	8,367,015	8,099,581	267,434	3.2	30.29
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	0	0	0	.	.
OHIO	0	0	0	.	.
OKLAHOMA	0	0	0	.	.
OREGON	14,520	0	14,520	100.0	0.00
PENNSYLVANIA	0	0	0	.	.
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	201,880	201,880	0	0.0	.
SOUTH DAKOTA	0	0	0	.	.
TENNESSEE	0	0	0	.	.
TEXAS	0	0	0	.	.
UTAH	0	0	0	.	.
VERMONT	0	0	0	.	.
VIRGINIA	0	0	0	.	.
WASHINGTON	0	0	0	.	.
WEST VIRGINIA	296,737	296,737	0	0.0	.
WISCONSIN	221,537	221,537	0	0.0	.
WYOMING	0	0	0	.	.
TOTAL U.S.	$10,151,267	$9,793,111	$358,156	3.5	27.34
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	322,215	84,425	237,790	73.8	0.36
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$322,215	$84,425	$237,790	73.8	0.36
U.S. & OUTLYING AREAS	$10,473,482	$9,877,536	$595,946	5.7	16.57

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.27 -- OUTLAYS FOR INDUSTRIAL ARTS UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	375,645	351,716	23,929	6.4	14.70
ALASKA	366,301	366,341	0	0.0	.
ARIZONA	160,086	72,684	87,402	54.6	0.83
ARKANSAS	546,573	468,724	77,849	14.2	6.02
CALIFORNIA	40,121,466	39,131,250	990,216	2.5	39.52
COLORADO	0	0	0	.	.
CONNECTICUT	0	0	0	.	.
DELAWARE	2,106,506	2,096,666	9,840	0.5	213.08
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	13,309,561	13,309,561	0	0.0	.
GEORGIA	6,251,994	6,188,266	63,728	1.0	97.10
HAWAII	0	0	0	.	.
IDAHO	140,261	140,261	0	0.0	.
ILLINOIS	0	0	0	.	.
INDIANA	0	0	0	.	.
IOWA	0	0	0	.	.
KANSAS	0	0	0	.	.
KENTUCKY	88,131	0	88,131	100.0	0.00
LOUISIANA	0	0	0	.	.
MAINE	0	0	0	.	.
MARYLAND	0	0	0	.	.
MASSACHUSETTS	21,895,935	20,751,678	1,144,257	5.2	18.14
MICHIGAN	31,228	1	31,227	100.0	0.00
MINNESOTA	0	0	0	.	.
MISSISSIPPI	2,830,302	2,578,254	252,048	8.9	10.23
MISSOURI	870,559	870,559	0	0.0	.
MONTANA	0	0	0	.	.
NEBRASKA	0	0	0	.	.
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	1,122,017	1,108,832	13,185	1.2	84.10
NEW JERSEY	6,579,961	6,356,072	223,889	3.4	28.49
NEW MEXICO	0	0	0	.	.
NEW YORK	0	0	0	.	.
NORTH CAROLINA	1,593,521	1,593,521	0	0.0	.
NORTH DAKOTA	794,341	794,341	0	0.0	.
OHIO	99,218	3,136	96,082	96.8	0.03
OKLAHOMA	6,157	6,089	68	1.1	89.54
OREGON	0	0	0	.	.
PENNSYLVANIA	0	0	0	.	.
RHODE ISLAND	5,259,000	5,194,623	64,377	1.2	80.69
SOUTH CAROLINA	0	0	0	.	.
SOUTH DAKOTA	0	0	0	.	.
TENNESSEE	1,030,068	1,030,068	0	0.0	.
TEXAS	3,630,780	3,630,780	0	0.0	.
UTAH	0	0	0	.	.
VERMONT	0	0	0	.	.
VIRGINIA	14,059,334	14,059,334	0	0.0	.
WASHINGTON	0	0	0	.	.
WEST VIRGINIA	1,672,149	1,623,871	48,278	2.9	33.64
WISCONSIN	0	0	0	.	.
WYOMING	0	0	0	.	.
TOTAL U.S.	$125,021,094	$121,807,388	$3,213,706	2.6	37.90
AMERICAN SAMOA	115,079	53,500	61,579	53.5	0.87
GUAM	10,644	0	10,644	100.0	0.00
PUERTO RICO	5,317,094	5,217,094	100,000	1.9	52.17
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$5,442,817	$5,270,594	$172,223	3.2	30.60
U.S. & OUTLYING AREAS	$130,463,911	$127,077,982	$3,385,929	2.6	37.53

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.28 -- OUTLAYS FOR SUPPORT SERVICES FOR WOMEN UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	0	0	0	.	.
ALASKA	0	0	0	.	.
ARIZONA	25,000	0	25,000	100.0	0.00
ARKANSAS	0	0	0	.	.
CALIFORNIA	397,615	273,456	124,159	31.2	2.20
COLORADO	0	0	0	.	.
CONNECTICUT	0	0	0	.	.
DELAWARE	8,451	0	8,451	100.0	0.00
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	16,008	16,008	0	0.0	.
GEORGIA	0	0	0	.	.
HAWAII	0	0	0	.	.
IDAHO	0	0	0	.	.
ILLINOIS	0	0	0	.	.
INDIANA	0	0	0	.	.
IOWA	0	0	0	.	.
KANSAS	0	0	0	.	.
KENTUCKY	881	0	881	100.0	0.00
LOUISIANA	0	0	0	.	.
MAINE	0	0	0	.	.
MARYLAND	4,558	0	4,558	100.0	0.00
MASSACHUSETTS	0	0	0	.	.
MICHIGAN	8,313	0	8,313	100.0	0.00
MINNESOTA	0	0	0	.	.
MISSISSIPPI	0	0	0	.	.
MISSOURI	0	0	0	.	.
MONTANA	0	0	0	.	.
NEBRASKA	0	0	0	.	.
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	0	0	0	.	.
NEW MEXICO	9,252	0	9,252	100.0	0.00
NEW YORK	0	0	0	.	.
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	0	0	0	.	.
OHIO	0	0	0	.	.
OKLAHOMA	0	0	0	.	.
OREGON	164,129	0	164,129	100.0	0.00
PENNSYLVANIA	0	0	0	.	.
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	0	0	0	.	.
SOUTH DAKOTA	0	0	0	.	.
TENNESSEE	0	0	0	.	.
TEXAS	51,328	1,565	49,763	97.0	0.03
UTAH	0	0	0	.	.
VERMONT	0	0	0	.	.
VIRGINIA	0	0	0	.	.
WASHINGTON	90,671	1,735	88,936	98.1	0.02
WEST VIRGINIA	19,198	246	18,952	98.7	0.01
WISCONSIN	91,688	23,862	67,826	74.0	0.35
WYOMING	0	0	0	.	.
TOTAL U.S.	$887,092	$316,872	$570,220	64.3	0.56
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	0	0	0	.	.
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$0	$0	$0	.	.
U.S. & OUTLYING AREAS	$887,092	$316,872	$570,220	64.3	0.56

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.29 -- OUTLAYS FOR DAY CARE SERVICES UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	OUTLAYS NON-FEDERAL	OUTLAYS FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	0	0	0	.	.
ALASKA	0	0	0	.	.
ARIZONA	27,300	0	27,300	100.0	0.00
ARKANSAS	0	0	0	.	.
CALIFORNIA	566,876	543,163	23,713	4.2	22.91
COLORADO	0	0	0	.	.
CONNECTICUT	0	0	0	.	.
DELAWARE	595	0	595	100.0	0.00
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	68,080	68,080	0	0.0	.
GEORGIA	0	0	0	.	.
HAWAII	0	0	0	.	.
IDAHO	0	0	0	.	.
ILLINOIS	0	0	0	.	.
INDIANA	0	0	0	.	.
IOWA	0	0	0	.	.
KANSAS	0	0	0	.	.
KENTUCKY	8,590	0	8,590	100.0	0.00
LOUISIANA	0	0	0	.	.
MAINE	0	0	0	.	.
MARYLAND	10,387	0	10,387	100.0	0.00
MASSACHUSETTS	0	0	0	.	.
MICHIGAN	0	0	0	.	.
MINNESOTA	0	0	0	.	.
MISSISSIPPI	0	0	0	.	.
MISSOURI	0	0	0	.	.
MONTANA	0	0	0	.	.
NEBRASKA	0	0	0	.	.
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	0	0	0	.	.
NEW MEXICO	0	0	0	.	.
NEW YORK	0	0	0	.	.
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	0	0	0	.	.
OHIO	0	0	0	.	.
OKLAHOMA	0	0	0	.	.
OREGON	0	0	0	.	.
PENNSYLVANIA	0	0	0	.	.
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	12,907	865	12,042	93.3	0.07
SOUTH DAKOTA	0	0	0	.	.
TENNESSEE	0	0	0	.	.
TEXAS	57,986	1,021	56,965	98.2	0.02
UTAH	0	0	0	.	.
VERMONT	0	0	0	.	.
VIRGINIA	0	0	0	.	.
WASHINGTON	53,278	16,427	36,851	69.2	0.45
WEST VIRGINIA	0	0	0	.	.
WISCONSIN	165,346	92,459	72,887	44.1	1.27
WYOMING	0	0	0	.	.
TOTAL U.S.	$971,345	$722,015	$249,330	25.7	2.90
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	0	0	0	.	.
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$0	$0	$0	.	.
U.S. & OUTLYING AREAS	$971,345	$722,015	$249,330	25.7	2.90

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.16 -- OUTLAYS FOR VOCATIONAL EDUCATION FOR DISPLACED HOMEMAKERS UNDER (VEA) SECTION 120,
BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA:
SCHOOL YEAR 1978-79
(INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	2,688	0	2,688	100.0	0.00
ALASKA	6,727	0	6,727	100.0	0.00
ARIZONA	20,417	0	20,417	100.0	0.00
ARKANSAS	10,015	0	10,015	100.0	0.00
CALIFORNIA	298,038	11,374	286,664	96.2	0.04
COLORADO	42,225	212	42,013	99.5	0.01
CONNECTICUT	12,003	0	12,003	100.0	0.00
DELAWARE	55,000	50,000	5,000	9.1	10.00
DISTRICT OF COLUMBIA	8,874	0	8,874	100.0	0.00
FLORIDA	114,797	113,052	1,745	1.5	64.79
GEORGIA	0	0	0	.	.
HAWAII	20,306	9,986	10,320	50.8	0.97
IDAHO	4,697	0	4,697	100.0	0.00
ILLINOIS	66,046	66,046	0	0.0	.
INDIANA	8,750	2,500	6,250	71.4	0.40
IOWA	268,791	181,551	87,240	32.5	2.08
KANSAS	35,250	0	35,250	100.0	0.00
KENTUCKY	20,212	0	20,212	100.0	0.00
LOUISIANA	12,317	0	12,317	100.0	0.00
MAINE	30,065	0	30,065	100.0	0.00
MARYLAND	47,147	3,501	43,646	92.6	0.08
MASSACHUSETTS	112,402	0	112,402	100.0	0.00
MICHIGAN	19,195	0	19,195	100.0	0.00
MINNESOTA	10,000	0	10,000	100.0	0.00
MISSISSIPPI	55,801	49,779	6,022	10.8	8.27
MISSOURI	151,810	6,574	145,236	95.7	0.05
MONTANA	0	0	0	.	.
NEBRASKA	107,943	107,943	0	0.0	.
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	14,541	0	14,541	100.0	0.00
NEW JERSEY	30,019	0	30,019	100.0	0.00
NEW MEXICO	4,350	0	4,350	100.0	0.00
NEW YORK	8,975,668	8,623,809	351,859	3.9	24.51
NORTH CAROLINA	20,950	10,487	10,463	49.9	1.00
NORTH DAKOTA	2,003	0	2,003	100.0	0.00
OHIO	7,555	649	6,906	91.4	0.09
OKLAHOMA	75,000	70,000	5,000	6.7	14.00
OREGON	361,081	348,932	12,149	3.4	28.72
PENNSYLVANIA	204,384	127,523	76,861	37.6	1.66
RHODE ISLAND	4,070	0	4,070	100.0	0.00
SOUTH CAROLINA	27,449	0	27,449	100.0	0.00
SOUTH DAKOTA	6,000	0	6,000	100.0	0.00
TENNESSEE	0	0	0	.	.
TEXAS	66,312	0	66,312	100.0	0.00
UTAH	4,981	0	4,981	100.0	0.00
VERMONT	0	0	0	.	.
VIRGINIA	14,444	0	14,444	100.0	0.00
WASHINGTON	224,301	54,293	170,008	75.8	0.32
WEST VIRGINIA	1	0	1	100.0	0.00
WISCONSIN	172,966	98,200	74,766	43.2	1.31
WYOMING	40,000	20,000	20,000	50.0	1.00
TOTAL U.S.	$11,794,551	$9,956,411	$1,838,140	15.6	5.42
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	0	0	0	.	.
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$0	$0	$0	.	.
U.S. & OUTLYING AREAS	$11,794,551	$9,956,411	$1,838,140	15.6	5.42

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.31 -- OUTLAYS FOR CONTRACTED SERVICES UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	NON-FEDERAL	FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	0	0	0	.	.
ALASKA	0	0	0	.	.
ARIZONA	280,948	236,169	44,779	15.9	5.27
ARKANSAS	12,958	11,763	1,195	9.2	9.84
CALIFORNIA	0	0	0	.	.
COLORADO	0	0	0	.	.
CONNECTICUT	0	0	0	.	.
DELAWARE	0	0	0	.	.
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	76,121	76,121	0	0.0	.
GEORGIA	0	0	0	.	.
HAWAII	0	0	0	.	.
IDAHO	0	0	0	.	.
ILLINOIS	0	0	0	.	.
INDIANA	0	0	0	.	.
IOWA	0	0	0	.	.
KANSAS	0	0	0	.	.
KENTUCKY	0	0	0	.	.
LOUISIANA	0	0	0	.	.
MAINE	0	0	0	.	.
MARYLAND	0	0	0	.	.
MASSACHUSETTS	0	0	0	.	.
MICHIGAN	2,172,780	2,172,780	0	0.0	.
MINNESOTA	0	0	0	.	.
MISSISSIPPI	0	0	0	.	.
MISSOURI	0	0	0	.	.
MONTANA	0	0	0	.	.
NEBRASKA	0	0	0	.	.
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	0	0	0	.	.
NEW MEXICO	0	0	0	.	.
NEW YORK	0	0	0	.	.
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	0	0	0	.	.
OHIO	338,225	338,225	0	0.0	.
OKLAHOMA	0	0	0	.	.
OREGON	1,000	0	1,000	100.0	0.00
PENNSYLVANIA	0	0	0	.	.
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	0	0	0	.	.
SOUTH DAKOTA	0	0	0	.	.
TENNESSEE	0	0	0	.	.
TEXAS	0	0	0	.	.
UTAH	0	0	0	.	.
VERMONT	0	0	0	.	.
VIRGINIA	0	0	0	.	.
WASHINGTON	0	0	0	.	.
WEST VIRGINIA	64,428	6,370	58,058	90.1	0.11
WISCONSIN	143,293	135,344	7,949	5.5	17.03
WYOMING	0	0	0	.	.
TOTAL U.S.	$3,089,753	$2,976,772	$112,981	3.7	26.35
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	196,734	98,367	98,367	50.0	1.00
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$196,734	$98,367	$98,367	50.0	1.00
U.S. & OUTLYING AREAS	$3,286,487	$3,075,139	$211,348	6.4	14.55

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.32 -- OUTLAYS FOR STATE ADMINISTRATION UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	1,902,910	951,455	951,455	50.0	1.00
ALASKA	328,377	196,641	131,736	40.1	1.49
ARIZONA	993,488	556,069	437,419	44.0	1.27
ARKANSAS	947,699	526,206	421,493	44.5	1.25
CALIFORNIA	4,621,094	1,689,077	2,932,017	63.4	0.58
COLORADO	1,603,421	628,844	974,577	60.8	0.65
CONNECTICUT	2,070,438	1,092,704	977,734	47.2	1.12
DELAWARE	402,747	158,706	244,041	60.6	0.65
DISTRICT OF COLUMBIA	242,905	104,076	138,829	57.2	0.75
FLORIDA	3,769,288	1,517,382	2,251,906	59.7	0.67
GEORGIA	1,941,628	849,132	1,092,496	56.3	0.78
HAWAII	562,279	412,044	150,235	26.7	2.74
IDAHO	667,189	667,189	0	0.0	*
ILLINOIS	1,583,801	692,643	891,158	56.3	0.78
INDIANA	943,419	441,048	502,371	53.3	0.88
IOWA	1,099,846	510,053	589,793	53.6	0.86
KANSAS	483,718	193,487	290,231	60.0	0.67
KENTUCKY	1,562,676	1,450,194	112,482	7.2	12.89
LOUISIANA	844,929	407,419	437,510	51.8	0.93
MAINE	846,670	464,924	381,746	45.1	1.22
MARYLAND	1,015,324	507,662	507,662	50.0	1.00
MASSACHUSETTS	1,671,816	699,926	971,890	58.1	0.72
MICHIGAN	1,332,981	580,123	752,858	56.5	0.77
MINNESOTA	2,314,566	1,574,418	740,148	32.0	2.13
MISSISSIPPI	1,385,283	1,073,049	312,234	22.5	3.44
MISSOURI	934,701	382,458	552,243	59.1	0.69
MONTANA	0	0	0	*	*
NEBRASKA	430,851	228,727	202,124	46.9	1.13
NEVADA	253,692	127,244	126,448	49.9	1.00
NEW HAMPSHIRE	643,454	199,615	443,839	69.0	0.45
NEW JERSEY	2,401,497	1,021,022	1,380,475	57.5	0.74
NEW MEXICO	526,597	238,205	288,392	54.8	0.83
NEW YORK	3,794,406	2,000,000	1,794,406	47.3	1.11
NORTH CAROLINA	2,324,115	2,212,587	111,528	4.8	19.84
NORTH DAKOTA	579,239	350,340	228,899	39.5	1.53
OHIO	1,461,331	674,347	786,984	53.9	0.86
OKLAHOMA	2,355,398	1,554,362	801,036	34.0	1.94
OREGON	1,141,165	414,391	726,774	63.7	0.57
PENNSYLVANIA	3,563,031	1,341,181	2,221,850	62.4	0.60
RHODE ISLAND	538,965	197,426	341,539	63.4	0.58
SOUTH CAROLINA	2,204,222	1,624,717	579,505	26.3	2.80
SOUTH DAKOTA	242,506	132,949	109,557	45.2	1.21
TENNESSEE	6,595,777	6,315,777	280,000	4.2	22.56
TEXAS	3,278,992	1,672,484	1,606,508	49.0	1.04
UTAH	675,540	443,005	232,535	34.4	1.91
VERMONT	230,780	173,917	56,863	24.6	3.06
VIRGINIA	1,336,995	1,167,586	169,409	12.7	6.89
WASHINGTON	1,742,008	792,777	949,231	54.5	0.84
WEST VIRGINIA	1,037,219	530,660	506,559	48.8	1.05
WISCONSIN	2,972,038	1,202,226	1,769,812	59.5	0.68
WYOMING	323,554	153,786	169,768	52.5	0.91
TOTAL U.S.	$76,726,705	$43,096,200	$33,630,505	43.8	1.28
AMERICAN SAMOA	92,079	40,230	51,849	56.3	0.78
GUAM	8,351	0	8,351	100.0	0.00
PUERTO RICO	821,421	302,656	518,765	63.2	0.58
TRUST TERRITORY	0	0	0	*	*
VIRGIN ISLANDS	0	0	0	*	*
OUTLYING AREAS	$921,851	$342,886	$578,965	62.8	0.59
U.S. & OUTLYING AREAS	$77,648,556	$43,439,086	$34,209,470	44.1	1.27

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.33 -- OUTLAYS FOR LOCAL ADMINISTRATION UNDER (VEA) SECTION 120, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	OUTLAYS NON-FEDERAL	OUTLAYS FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	2,136,948	2,066,246	70,702	3.3	29.22
ALASKA	0	0	0	.	.
ARIZONA	856,357	856,357	0	0.0	.
ARKANSAS	2,426,728	2,403,228	23,500	1.0	102.27
CALIFORNIA	36,187,910	34,890,908	1,297,002	3.6	26.90
COLORADO	3,567,426	3,509,516	57,910	1.6	60.60
CONNECTICUT	0	0	0	.	.
DELAWARE	0	0	0	.	.
DISTRICT OF COLUMBIA	271,348	135,674	135,674	50.0	1.00
FLORIDA	33,470,524	33,290,957	179,567	0.5	185.40
GEORGIA	1,793,982	1,654,634	139,348	7.8	11.87
HAWAII	0	0	0	.	.
IDAHO	1,931,357	1,931,357	0	0.0	.
ILLINOIS	0	0	0	.	.
INDIANA	2,416,297	2,073,936	342,361	14.2	6.06
IOWA	0	0	0	.	.
KANSAS	1,692,772	1,692,772	0	0.0	.
KENTUCKY	2,934,999	2,934,999	0	0.0	.
LOUISIANA	0	0	0	.	.
MAINE	0	0	0	.	.
MARYLAND	4,250,529	3,991,026	259,503	6.1	15.38
MASSACHUSETTS	5,103,096	5,103,096	0	0.0	.
MICHIGAN	15,124,682	14,576,028	548,654	3.6	26.57
MINNESOTA	0	0	0	.	.
MISSISSIPPI	2,067,387	2,066,[illegible]	960	0.0	2152.53
MISSOURI	2,637,872	2,637,872	0	0.0	.
MONTANA	0	0	0	.	.
NEBRASKA	863,485	760,861	102,624	11.9	7.41
NEVADA	786,727	779,503	7,224	0.9	107.90
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	0	0	0	.	.
NEW MEXICO	0	0	0	.	.
NEW YORK	0	0	0	.	.
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	747,438	747,438	0	0.0	.
OHIO	12,747,993	11,182,411	1,565,582	12.3	7.14
OKLAHOMA	2,086,692	1,989,087	97,605	4.7	20.38
OREGON	0	0	0	.	.
PENNSYLVANIA	5,320,854	5,320,854	0	0.0	.
RHODE ISLAND	241,588	120,794	120,794	50.0	1.00
SOUTH CAROLINA	26,126,858	26,042,653	84,205	0.3	309.28
SOUTH DAKOTA	764,848	591,379	173,469	22.7	3.41
TENNESSEE	3,350,720	3,343,544	7,176	0.2	465.93
TEXAS	29,753,273	29,425,368	327,905	1.1	89.74
UTAH	0	0	0	.	.
VERMONT	668,848	668,848	0	0.0	.
VIRGINIA	4,383,528	4,383,528	0	0.0	.
WASHINGTON	7,802,661	7,403,609	399,052	5.1	18.55
WEST VIRGINIA	3,738,593	3,737,038	1,555	0.0	2403.24
WISCONSIN	19,841,427	19,673,159	168,268	0.8	116.92
WYOMING	0	0	0	.	.
TOTAL U.S.	$238,196,549	$232,085,929	$6,110,620	2.6	37.98
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	0	0	0	.	.
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$0	$0	$0	.	.
U.S. & OUTLYING AREAS	$238,196,549	$232,085,929	$6,110,620	2.6	37.98

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.34 -- OUTLAYS FOR VOCATIONAL EDUCATION (VEA) SECTION 130 PROGRAMS, BY AUTHORIZATION YEAR AND SOURCE OF FUNDS, AND BY PROGRAM: SCHOOL YEAR 1978-79

PROGRAM	FISCAL YEAR 1979 TOTAL	FISCAL YEAR 1979 NON-FEDERAL	FISCAL YEAR 1979 FEDERAL	FISCAL YEAR 1978 TOTAL	FISCAL YEAR 1978 NON-FEDERAL	FISCAL YEAR 1978 FEDERAL
TOTAL--RCU	26,696,365	13,421,611	13,274,754	13,907,849	2,392,941	11,514,908
GUIDANCE AND COUNSELING	178,459,382	152,807,727	25,651,655	37,866,135	22,369,524	15,496,611
PRESERVICE AND INSERVICE TRAINING	32,549,866	18,989,710	13,560,156	13,208,359	4,207,773	9,000,586
SEX-BIAS GRANTS	1,454,808	160,156	1,294,652	719,937	117,965	601,972
STATE ADMINISTRATION	16,374,518	7,639,219	8,735,299	1,780,753	503,052	1,277,701
LOCAL ADMINISTRATION	22,185,225	21,299,254	885,971	1,694,605	327,851	1,366,754
1/EVALUATION	33,894	0	33,894	0	0	0
SECTION TOTAL	$277,754,058	$214,317,677	$63,436,381	$69,177,638	$29,919,106	$39,258,532

NOTE: NO SUBSECTION TABLE FOR THE FOLLOWING:
1/ EVALUATION--WEST VIRGINIA ONLY.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.35 -- OUTLAYS FOR TOTAL-RCU UNDER (VEA) SECTION 130,
BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA:
SCHOOL YEAR 1978-79
(INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS: TOTAL	OUTLAYS: NON-FEDERAL	OUTLAYS: FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	442,147	20,093	422,054	95.5	0.05
ALASKA	154,571	0	154,571	100.0	0.00
ARIZONA	370,684	121,950	248,734	67.1	0.49
ARKANSAS	221,823	26,887	194,936	87.9	0.14
CALIFORNIA	4,300,757	1,652,266	2,648,491	61.6	0.62
COLORADO	299,945	35,861	264,084	88.0	0.14
CONNECTICUT	120,762	0	120,762	100.0	0.00
DELAWARE	250,569	199,132	51,437	20.5	3.87
DISTRICT OF COLUMBIA	63,323	5,124	58,199	91.9	0.09
FLORIDA	2,659,067	1,904,725	754,342	28.4	2.53
GEORGIA	707,272	157,437	549,835	77.7	0.29
HAWAII	72,428	24,072	48,356	66.8	0.50
IDAHO	224,327	122,672	101,655	45.3	1.21
ILLINOIS	1,854,181	831,739	1,022,442	55.1	0.81
INDIANA	1,280,972	312,057	968,915	75.6	0.32
IOWA	931,301	475,238	456,063	49.0	1.04
KANSAS	404,504	142,736	261,768	64.7	0.55
KENTUCKY	886,359	44,574	841,785	95.0	0.05
LOUISIANA	252,843	0	252,843	100.0	0.00
MAINE	100,316	0	100,316	100.0	0.00
MARYLAND	1,066,185	61,310	1,004,875	94.2	0.06
MASSACHUSETTS	463,303	121,600	341,703	73.7	0.36
MICHIGAN	109,613	0	109,613	100.0	0.00
MINNESOTA	430,695	125,000	305,695	71.0	0.41
MISSISSIPPI	589,754	447,599	142,155	24.1	3.15
MISSOURI	950,072	695,506	254,566	26.8	2.73
MONTANA	0	0	0	.	.
NEBRASKA	178,482	70,332	108,150	60.6	0.65
NEVADA	113,293	0	113,293	100.0	0.00
NEW HAMPSHIRE	38,897	20,000	18,897	48.6	1.06
NEW JERSEY	1,660,970	851,966	809,004	48.7	1.05
NEW MEXICO	174,860	21,256	153,604	87.8	0.14
NEW YORK	3,144,605	0	3,144,605	100.0	0.00
NORTH CAROLINA	478,973	37,180	441,793	92.2	0.08
NORTH DAKOTA	85,213	5,452	79,761	93.6	0.07
OHIO	4,773,585	3,012,721	1,760,864	36.9	1.71
OKLAHOMA	1,530,881	1,116,199	414,682	27.1	2.69
OREGON	281,286	65,773	215,513	76.6	0.31
PENNSYLVANIA	507,420	338,009	169,411	33.4	2.00
RHODE ISLAND	42,085	0	42,085	100.0	0.00
SOUTH CAROLINA	489,053	0	489,053	100.0	0.00
SOUTH DAKOTA	94,740	0	94,740	100.0	0.00
TENNESSEE	659,675	0	659,675	100.0	0.00
TEXAS	2,072,853	4,828	2,068,025	99.8	0.00
UTAH	289,789	173,148	116,641	40.3	1.48
VERMONT	99,889	0	99,889	100.0	0.00
VIRGINIA	465,336	28,880	436,456	93.8	0.07
WASHINGTON	422,697	140,309	282,388	66.8	0.50
WEST VIRGINIA	627,496	319,168	308,328	49.1	1.04
WISCONSIN	2,657,549	1,968,365	689,184	25.9	2.86
WYOMING	226,616	113,308	113,308	50.0	1.00
TOTAL U.S.	$40,324,096	$15,814,552	$24,509,544	60.8	0.65
AMERICAN SAMOA	13,427	0	13,427	100.0	0.00
GUAM	1,403	0	1,403	100.0	0.00
PUERTO RICO	265,288	0	265,288	100.0	0.00
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$280,118	$0	$280,118	100.0	0.00
U.S. & OUTLYING AREAS	$40,604,214	$15,814,552	$24,789,662	61.1	0.64

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.36 -- OUTLAYS FOR RESEARCH-RCU UNDER (VEA) SECTION 136, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	 NON-FEDERAL	 FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	11,682	0	11,682	100.0	0.00
ALASKA	0	0	0	.	.
ARIZONA	0	0	0	.	.
ARKANSAS	128,979	26,468	102,511	79.5	0.26
CALIFORNIA	1,072,394	728,877	343,517	32.0	2.12
COLORADO	146,763	102	146,661	99.9	0.00
CONNECTICUT	36,694	0	36,694	100.0	0.00
DELAWARE	12,837	8,000	4,837	37.7	1.65
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	453,865	52,222	401,643	88.5	0.13
GEORGIA	0	0	0	.	.
HAWAII	52,981	24,072	28,909	54.6	0.83
IDAHO	4,617	0	4,617	100.0	0.00
ILLINOIS	0	0	0	.	.
INDIANA	244,388	91,322	153,066	62.6	0.60
IOWA	544,338	333,807	210,531	38.7	1.59
KANSAS	78,334	20,125	58,209	74.3	0.35
KENTUCKY	288,514	44,574	243,940	84.6	0.18
LOUISIANA	44,455	0	44,455	100.0	0.00
MAINE	0	0	0	.	.
MARYLAND	0	0	0	.	.
MASSACHUSETTS	52,437	0	52,437	100.0	0.00
MICHIGAN	0	0	0	.	.
MINNESOTA	0	0	0	.	.
MISSISSIPPI	0	0	0	.	.
MISSOURI	0	0	0	.	.
MONTANA	0	0	0	.	.
NEBRASKA	89,511	27,775	61,736	69.0	0.45
NEVADA	37,973	0	37,973	100.0	0.00
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	514,478	280,964	233,514	45.4	1.20
NEW MEXICO	66,406	0	66,406	100.0	0.00
NEW YORK	1,534,024	0	1,534,024	100.0	0.00
NORTH CAROLINA	351,244	37,180	314,064	89.4	0.12
NORTH DAKOTA	0	0	0	.	.
OHIO	462,752	56,219	406,533	87.9	0.14
OKLAHOMA	78,975	21,885	57,090	72.3	0.38
OREGON	104,935	19,523	85,412	81.4	0.23
PENNSYLVANIA	335,569	10,417	325,152	96.9	0.03
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	47,049	0	47,049	100.0	0.00
SOUTH DAKOTA	50,292	10,052	40,240	80.0	0.25
TENNESSEE	47,485	0	47,485	100.0	0.00
TEXAS	377,124	0	377,124	100.0	0.00
UTAH	83,793	0	83,793	100.0	0.00
VERMONT	31,362	0	31,362	100.0	0.00
VIRGINIA	284,864	28,880	255,984	89.9	0.11
WASHINGTON	0	0	0	.	.
WEST VIRGINIA	282,936	207,070	75,866	26.8	2.73
WISCONSIN	1,197,902	941,841	256,061	21.4	3.68
WYOMING	16,000	8,000	8,000	50.0	1.00
TOTAL U.S.	$9,167,952	$2,979,375	$6,188,577	67.5	0.48
AMERICAN SAMOA	4,464	0	4,464	100.0	0.00
GUAM	43	0	43	100.0	0.00
PUERTO RICO	180,895	0	180,895	100.0	0.00
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$185,402	$0	$185,402	100.0	0.00
U.S. & OUTLYING AREAS	$9,353,354	$2,979,375	$6,373,979	68.1	0.47

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

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TABLE 7.37 -- OUTLAYS FOR EXEMPLARY PROGRAMS-RCU UNDER (VEA) SECTION 136, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	 NON-FEDERAL	 FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	0	0	0	.	.
ALASKA	0	0	0	.	.
ARIZONA	0	0	0	.	.
ARKANSAS	80,939	0	80,939	100.0	0.00
CALIFORNIA	196,207	0	196,207	100.0	0.00
COLORADO	68,182	35,759	32,423	47.6	1.10
CONNECTICUT	71,190	0	71,190	100.0	0.00
DELAWARE	10,600	7,000	3,600	34.0	1.94
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	50,224	3,918	46,306	92.2	0.08
GEORGIA	0	0	0	.	.
HAWAII	19,447	0	19,447	100.0	0.00
IDAHO	98,686	16,033	82,653	83.8	0.19
ILLINOIS	0	0	0	.	.
INDIANA	521,783	161,248	360,535	69.1	0.45
IOWA	138,510	61,101	77,409	55.9	0.79
KANSAS	238,950	113,171	125,779	52.6	0.90
KENTUCKY	261,331	0	261,331	100.0	0.00
LOUISIANA	38,903	0	38,903	100.0	0.00
MAINE	0	0	0	.	.
MARYLAND	0	0	0	.	.
MASSACHUSETTS	316,972	121,680	195,292	61.6	0.62
MICHIGAN	0	0	0	.	.
MINNESOTA	0	0	0	.	.
MISSISSIPPI	0	0	0	.	.
MISSOURI	0	0	0	.	.
MONTANA	0	0	0	.	.
NEBRASKA	30,290	26,583	3,707	12.2	7.17
NEVADA	75,320	0	75,320	100.0	0.00
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	951,731	539,385	412,346	43.3	1.31
NEW MEXICO	83,021	0	83,021	100.0	0.00
NEW YORK	34,150	0	34,150	100.0	0.00
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	0	0	0	.	.
OHIO	4,006,949	2,955,884	1,051,065	26.2	2.81
OKLAHOMA	49,160	683	48,477	98.6	0.01
OREGON	58,285	3,230	55,055	94.5	0.06
PENNSYLVANIA	399,700	131,870	267,830	67.0	0.49
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	0	0	0	.	.
SOUTH DAKOTA	109,000	27,250	81,750	75.0	0.33
TENNESSEE	245,137	0	245,137	100.0	0.00
TEXAS	425,079	1,263	423,816	99.7	0.00
UTAH	185,392	161,707	23,685	12.8	6.83
VERMONT	42,027	0	42,027	100.0	0.00
VIRGINIA	31,021	0	31,021	100.0	0.00
WASHINGTON	0	0	0	.	.
WEST VIRGINIA	91,202	46,575	44,627	48.9	1.04
WISCONSIN	130,540	83,056	47,484	36.4	1.75
WYOMING	210,616	105,308	105,308	50.0	1.00
TOTAL U.S.	$9,270,544	$4,602,704	$4,667,840	50.4	0.99
AMERICAN SAMOA	5,597	0	5,597	100.0	0.00
GUAM	0	0	0	.	.
PUERTO RICO	0	0	0	.	.
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$5,597	$0	$5,597	100.0	0.00
U.S. & OUTLYING AREAS	$9,276,141	$4,602,704	$4,673,437	50.4	0.98

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.38 -- OUTLAYS FOR CURRICULUM DEVELOPMENT-RCU UNDER (VEA) SECTION 130, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	12,500	0	12,500	100.0	0.00
ALASKA	0	0	0	.	.
ARIZONA	0	0	0	.	.
ARKANSAS	11,905	419	11,486	96.5	0.04
CALIFORNIA	1,091,839	719,783	372,056	34.1	1.93
COLORADO	85,000	0	85,000	100.0	0.00
CONNECTICUT	30,000	0	30,000	100.0	0.00
DELAWARE	227,132	184,132	43,000	18.9	4.28
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	2,154,978	1,848,585	306,393	14.2	6.03
GEORGIA	0	0	0	.	.
HAWAII	0	0	0	.	.
IDAHO	121,024	106,639	14,385	11.9	7.41
ILLINOIS	0	0	0	.	.
INDIANA	514,801	59,487	455,314	88.4	0.13
IOWA	248,453	80,330	168,123	67.7	0.48
KANSAS	125,963	28,785	97,178	77.1	0.30
KENTUCKY	336,514	0	336,514	100.0	0.00
LOUISIANA	7,500	0	7,500	100.0	0.00
MAINE	0	0	0	.	.
MARYLAND	0	0	0	.	.
MASSACHUSETTS	93,974	0	93,974	100.0	0.00
MICHIGAN	0	0	0	.	.
MINNESOTA	0	0	0	.	.
MISSISSIPPI	0	0	0	.	.
MISSOURI	0	0	0	.	.
MONTANA	0	0	0	.	.
NEBRASKA	58,680	15,973	42,707	72.8	0.37
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	194,761	31,617	163,144	83.8	0.19
NEW MEXICO	25,433	21,256	4,177	16.4	5.09
NEW YORK	1,576,431	0	1,576,431	100.0	0.00
NORTH CAROLINA	127,729	0	127,729	100.0	0.00
NORTH DAKOTA	0	0	0	.	.
OHIO	308,936	618	308,318	99.8	0.00
OKLAHOMA	1,402,746	1,093,631	309,115	22.0	3.54
OREGON	162,871	43,020	119,851	73.6	0.36
PENNSYLVANIA	301,452	195,722	105,730	35.1	1.85
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	0	0	0	.	.
SOUTH DAKOTA	10,000	0	10,000	100.0	0.00
TENNESSEE	367,053	0	367,053	100.0	0.00
TEXAS	1,270,650	3,565	1,267,085	99.7	0.00
UTAH	20,604	11,441	9,163	44.5	1.25
VERMONT	26,500	0	26,500	100.0	0.00
VIRGINIA	149,451	0	149,451	100.0	0.00
WASHINGTON	0	0	0	.	.
WEST VIRGINIA	253,358	65,523	187,835	74.1	0.35
WISCONSIN	1,354,938	969,299	385,639	28.5	2.51
WYOMING	0	0	0	.	.
TOTAL U.S.	$12,673,256	$5,479,825	$7,193,431	56.8	0.76
AMERICAN SAMOA	3,366	0	3,366	100.0	0.00
GUAM	1,360	0	1,360	100.0	0.00
PUERTO RICO	84,393	0	84,393	100.0	0.00
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$89,119	$0	$89,119	100.0	0.00
U.S. & OUTLYING AREAS	$12,762,375	$5,479,825	$7,282,550	57.1	0.75

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.39 -- OUTLAYS FOR GUIDANCE AND COUNSELING UNDER (VEA) SECTION 130, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREAS: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	3,702,615	2,277,284	1,425,331	38.5	1.60
ALASKA	27,500	0	27,500	100.0	0.00
ARIZONA	724,994	135,909	589,085	81.2	0.23
ARKANSAS	2,979,691	2,486,055	493,636	16.6	5.03
CALIFORNIA	39,349,630	34,832,347	4,517,283	11.5	7.71
COLORADO	840,275	558,853	281,422	33.5	1.99
CONNECTICUT	1,722,625	1,346,171	376,454	21.9	3.58
DELAWARE	986,432	826,000	160,432	16.3	5.15
DISTRICT OF COLUMBIA	164,608	0	164,608	100.0	0.00
FLORIDA	7,770,620	7,113,427	657,193	8.5	10.82
GEORGIA	2,019,532	1,031,376	988,156	48.9	1.04
HAWAII	809,492	564,292	245,200	30.3	2.30
IDAHO	497,916	270,624	227,292	45.6	1.19
ILLINOIS	835,535	156,875	678,660	81.2	0.23
INDIANA	648,729	172,606	476,123	73.4	0.36
IOWA	340,580	14,605	325,975	95.7	0.04
KANSAS	1,187,837	849,216	338,621	28.5	2.51
KENTUCKY	815,383	351,013	464,370	57.0	0.76
LOUISIANA	9,202,230	7,884,198	1,318,032	14.3	5.98
MAINE	364,208	225,000	139,208	38.2	1.62
MARYLAND	3,393,646	2,679,911	713,735	21.0	3.75
MASSACHUSETTS	7,142,200	6,086,910	1,055,290	14.8	5.77
MICHIGAN	29,950,354	26,087,467	3,873,887	12.9	6.70
MINNESOTA	4,883,283	4,000,000	883,283	18.1	4.53
MISSISSIPPI	4,500,570	3,400,819	1,099,751	24.4	3.09
MISSOURI	17,439,732	15,578,330	1,861,402	10.7	8.37
MONTANA	0	0	0	*	*
NEBRASKA	504,794	260,557	244,237	48.4	1.07
NEVADA	59,851	29,870	29,981	50.1	1.00
NEW HAMPSHIRE	170,540	109,678	60,862	35.7	1.80
NEW JERSEY	1,696,399	1,052,290	644,109	38.0	1.63
NEW MEXICO	49,716	0	49,716	100.0	0.00
NEW YORK	2,209,357	0	2,209,357	100.0	0.00
NORTH CAROLINA	9,737,234	7,158,154	2,579,080	26.5	2.78
NORTH DAKOTA	335,604	265,281	70,323	21.0	3.77
OHIO	7,598,572	6,117,192	1,481,380	19.5	4.13
OKLAHOMA	1,414,663	999,065	415,598	29.4	2.40
OREGON	372,371	105,262	267,109	71.7	0.39
PENNSYLVANIA	9,570,530	7,669,550	1,900,980	19.9	4.03
RHODE ISLAND	1,125,959	859,965	265,994	23.6	3.23
SOUTH CAROLINA	4,726,999	3,867,079	859,920	18.2	4.50
SOUTH DAKOTA	237,914	116,540	121,374	51.0	0.96
TENNESSEE	1,553,754	525,162	1,028,592	66.2	0.51
TEXAS	11,580,492	10,156,492	1,424,000	12.3	7.13
UTAH	828,982	728,569	100,413	12.1	7.26
VERMONT	245,736	188,667	57,069	23.2	3.31
VIRGINIA	582,490	115,432	467,058	80.2	0.25
WASHINGTON	5,991,889	5,082,953	908,936	15.2	5.59
WEST VIRGINIA	755,555	531,443	224,112	29.7	2.37
WISCONSIN	7,967,731	7,226,780	740,951	9.3	9.75
WYOMING	39,600	19,800	19,800	50.0	1.00
TOTAL U.S.	$211,665,149	$172,115,149	$39,550,000	18.7	4.35
AMERICAN SAMOA	7,278	0	7,278	100.0	0.00
GUAM	0	0	0	*	*
PUERTO RICO	4,653,090	3,062,102	1,590,988	34.2	1.92
TRUST TERRITORY	0	0	0	*	*
VIRGIN ISLANDS	0	0	0	*	*
OUTLYING AREAS	$4,660,368	$3,062,102	$1,598,266	34.3	1.92
U.S. & OUTLYING AREAS	$216,325,517	$175,177,251	$41,148,266	19.0	4.26

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.48 -- OUTLAYS FOR PRESERVICE AND INSERVICE TRAINING UNDER (VEA) SECTION 136, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	 NON-FEDERAL	 FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	127,492	0	127,492	100.0	0.00
ALASKA	0	0	0	*	*
ARIZONA	520,926	314,256	206,670	39.7	1.52
ARKANSAS	827,886	725,997	101,889	12.3	7.13
CALIFORNIA	5,134,433	2,103,126	3,031,307	59.0	0.69
COLORADO	1,486,118	917,647	568,471	38.3	1.61
CONNECTICUT	261,376	1,933	259,443	99.3	0.01
DELAWARE	0	0	0	*	*
DISTRICT OF COLUMBIA	0	0	0	*	*
FLORIDA	2,100,831	580,228	1,520,603	72.4	0.38
GEORGIA	573,686	5,418	568,268	99.1	0.01
HAWAII	88,348	38,373	49,975	56.6	0.77
IDAHO	468,295	333,372	134,923	28.8	2.47
ILLINOIS	946,708	383,581	563,127	59.5	0.68
INDIANA	1,156,953	584,210	572,743	49.5	1.02
IOWA	300,587	6,703	293,884	97.8	0.02
KANSAS	433,072	247,016	186,056	43.0	1.33
KENTUCKY	818,679	285,655	533,024	65.1	0.54
LOUISIANA	698,633	336,170	362,463	51.9	0.93
MAINE	388,919	176,643	212,276	54.6	0.83
MARYLAND	598,366	9,836	588,530	98.4	0.02
MASSACHUSETTS	297,533	11,609	285,924	96.1	0.04
MICHIGAN	1,593,247	1,430,583	162,664	10.2	8.79
MINNESOTA	3,160,608	2,600,000	560,608	17.7	4.64
MISSISSIPPI	975,037	936,497	38,540	4.0	24.30
MISSOURI	1,626,027	1,291,092	334,935	20.6	3.85
MONTANA	0	0	0	*	*
NEBRASKA	875,706	629,891	245,815	28.1	2.56
NEVADA	39,027	0	39,027	100.0	0.00
NEW HAMPSHIRE	322,845	214,950	107,895	33.4	1.99
NEW JERSEY	1,954,575	1,435,301	519,274	26.6	2.76
NEW MEXICO	231,213	13,709	217,504	94.1	0.06
NEW YORK	619,245	0	619,245	100.0	0.00
NORTH CAROLINA	32,665	0	32,665	100.0	0.00
NORTH DAKOTA	321,575	179,859	141,716	44.1	1.27
OHIO	1,865,234	365,964	1,499,270	80.4	0.24
OKLAHOMA	1,009,499	638,182	371,317	36.8	1.72
OREGON	676,471	968	675,503	99.9	0.00
PENNSYLVANIA	4,096,801	2,320,976	1,775,825	43.3	1.31
RHODE ISLAND	0	0	0	*	*
SOUTH CAROLINA	945,207	737,443	207,764	22.0	3.55
SOUTH DAKOTA	144,329	87,109	57,220	39.6	1.52
TENNESSEE	407,395	0	407,395	100.0	0.00
TEXAS	1,153,739	0	1,153,739	100.0	0.00
UTAH	1,610,329	939,821	670,508	41.6	1.40
VERMONT	119,514	64,620	54,894	45.9	1.18
VIRGINIA	2,788,184	1,482,199	1,305,985	46.8	1.13
WASHINGTON	978,909	412,419	566,490	57.9	0.73
WEST VIRGINIA	521,877	154,872	367,005	70.3	0.42
WISCONSIN	367,022	192,327	174,695	47.6	1.10
WYOMING	13,856	6,928	6,928	50.0	1.00
TOTAL U.S.	$45,678,977	$23,197,483	$22,481,494	49.2	1.03
AMERICAN SAMOA	9,754	0	9,754	100.0	0.00
GUAM	0	0	0	*	*
PUERTO RICO	69,494	0	69,494	100.0	0.00
TRUST TERRITORY	0	0	0	*	*
VIRGIN ISLANDS	0	0	0	*	*
OUTLYING AREAS	$79,248	$0	$79,248	100.0	0.00
U.S. & OUTLYING AREAS	$45,758,225	$23,197,483	$22,560,742	49.3	1.03

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.41 -- OUTLAYS FOR SEX-BIAS GRANTS UNDER (VEA) SECTION 136, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	OUTLAYS NON-FEDERAL	OUTLAYS FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	0	0	0	.	.
ALASKA	0	0	0	.	.
ARIZONA	9,980	150	9,830	98.5	0.02
ARKANSAS	0	0	0	.	.
CALIFORNIA	320,044	0	320,044	100.0	0.00
COLORADO	0	0	0	.	.
CONNECTICUT	0	0	0	.	.
DELAWARE	0	0	0	.	.
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	15,443	15,443	0	0.0	.
GEORGIA	0	0	0	.	.
HAWAII	0	0	0	.	.
IDAHO	0	0	0	.	.
ILLINOIS	63,643	8,922	54,721	86.0	0.16
INDIANA	40,764	15,764	25,000	61.3	0.63
IOWA	0	0	0	.	.
KANSAS	0	0	0	.	.
KENTUCKY	13,847	0	13,847	100.0	0.00
LOUISIANA	6,314	0	6,314	100.0	0.00
MAINE	14,628	0	14,628	100.0	0.00
MARYLAND	98,558	2,179	96,379	97.8	0.02
MASSACHUSETTS	103,529	69,055	34,474	33.3	2.00
MICHIGAN	21,181	0	21,181	100.0	0.00
MINNESOTA	80,000	0	80,000	100.0	0.00
MISSISSIPPI	12,730	0	12,730	100.0	0.00
MISSOURI	76,420	44	76,376	99.9	0.00
MONTANA	0	0	0	.	.
NEBRASKA	11,209	5,637	5,572	49.7	1.01
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	351,678	105,645	246,033	70.0	0.43
NEW MEXICO	2,906	0	2,906	100.0	0.00
NEW YORK	734,511	0	734,511	100.0	0.00
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	0	0	0	.	.
OHIO	10,902	0	10,902	100.0	0.00
OKLAHOMA	0	0	0	.	.
OREGON	0	0	0	.	.
PENNSYLVANIA	0	0	0	.	.
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	24,312	0	24,312	100.0	0.00
SOUTH DAKOTA	0	0	0	.	.
TENNESSEE	867	0	867	100.0	0.00
TEXAS	28,160	0	28,160	100.0	0.00
UTAH	0	0	0	.	.
VERMONT	0	0	0	.	.
VIRGINIA	5,024	0	5,024	100.0	0.00
WASHINGTON	39,284	28,381	10,903	27.8	2.60
WEST VIRGINIA	45,311	1,591	43,720	96.5	0.04
WISCONSIN	42,037	25,310	16,727	39.8	1.51
WYOMING	0	0	0	.	.
TOTAL U.S.	$2,173,282	$278,121	$1,895,161	87.2	0.15
AMERICAN SAMOA	1,400	0	1,400	100.0	0.00
GUAM	63	0	63	100.0	0.00
PUERTO RICO	0	0	0	.	.
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$1,463	$0	$1,463	100.0	0.00
U.S. & OUTLYING AREAS	$2,174,745	$278,121	$1,896,624	87.2	0.15

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.42 -- OUTLAYS FOR STATE ADMINISTRATION UNDER (VEA) SECTION 130, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREAS: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	 NON-FEDERAL	 FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	472,100	236,050	236,050	50.0	1.00
ALASKA	105,308	49,229	56,079	53.3	0.88
ARIZONA	361,003	0	361,003	100.0	0.00
ARKANSAS	236,924	131,551	105,373	44.5	1.25
CALIFORNIA	1,870,715	0	1,870,715	100.0	0.00
COLORADO	354,798	141,919	212,879	60.0	0.67
CONNECTICUT	324,905	103,587	221,318	68.1	0.47
DELAWARE	67,237	35,571	31,666	47.1	1.12
DISTRICT OF COLUMBIA	69,324	28,413	40,911	59.0	0.69
FLORIDA	942,522	379,330	563,192	59.8	0.67
GEORGIA	274,168	0	274,168	100.0	0.00
HAWAII	61,398	0	61,398	100.0	0.00
IDAHO	46,061	46,061	0	0.0	.
ILLINOIS	716,600	384,002	332,598	46.4	1.15
INDIANA	235,855	110,262	125,593	53.3	0.88
IOWA	274,961	127,513	147,448	53.6	0.86
KANSAS	172,430	68,972	103,458	60.0	0.67
KENTUCKY	130,073	101,874	28,199	21.7	3.61
LOUISIANA	162,365	52,987	109,378	67.4	0.48
MAINE	67,198	0	67,198	100.0	0.00
MARYLAND	260,080	130,040	130,040	50.0	1.00
MASSACHUSETTS	417,954	174,982	242,972	58.1	0.72
MICHIGAN	336,718	145,030	191,688	56.9	0.76
MINNESOTA	237,800	0	237,800	100.0	0.00
MISSISSIPPI	346,321	268,263	78,058	22.5	3.44
MISSOURI	236,758	95,614	141,144	59.6	0.68
MONTANA	0	0	0	.	.
NEBRASKA	107,295	56,764	50,531	47.1	1.12
NEVADA	63,473	31,811	31,662	49.9	1.00
NEW HAMPSHIRE	84,838	16,353	68,485	80.7	0.24
NEW JERSEY	600,375	255,256	345,119	57.5	0.74
NEW MEXICO	131,094	59,551	71,543	54.6	0.83
NEW YORK	948,602	500,000	448,602	47.3	1.11
NORTH CAROLINA	56,296	0	56,296	100.0	0.00
NORTH DAKOTA	99,094	38,713	60,381	60.9	0.64
OHIO	365,333	168,587	196,746	53.9	0.86
OKLAHOMA	508,850	308,591	200,259	39.4	1.54
OREGON	76,413	0	76,413	100.0	0.00
PENNSYLVANIA	890,764	335,302	555,462	62.4	0.60
RHODE ISLAND	194,789	111,201	83,588	42.9	1.33
SOUTH CAROLINA	462,257	315,554	146,703	31.7	2.15
SOUTH DAKOTA	66,323	33,161	33,162	50.0	1.00
TENNESSEE	1,776,970	1,579,016	197,954	11.1	7.98
TEXAS	723,239	418,121	305,118	42.2	1.37
UTAH	185,673	105,251	80,422	43.3	1.31
VERMONT	35,042	25,256	9,786	27.9	2.58
VIRGINIA	334,249	291,896	42,353	12.7	6.89
WASHINGTON	461,433	143,664	317,769	68.9	0.45
WEST VIRGINIA	227,462	132,937	94,525	41.6	1.41
WISCONSIN	742,797	300,556	442,241	59.5	0.68
WYOMING	65,921	23,480	42,441	64.4	0.55
TOTAL U.S.	$18,070,958	$8,142,271	$9,928,687	54.9	0.82
AMERICAN SAMOA	12,963	0	12,963	100.0	0.00
GUAM	0	0	0	.	.
PUERTO RICO	70,270	0	70,270	100.0	0.00
TRUST TERRITORY	1,080	0	1,080	100.0	0.00
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$84,313	$0	$84,313	100.0	0.00
U.S. & OUTLYING AREAS	$18,155,271	$8,142,271	$10,013,000	55.2	0.81

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.43 -- OUTLAYS FOR LOCAL ADMINISTRATION UNDER (VEA) SECTION 130, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	OUTLAYS NON-FEDERAL	OUTLAYS FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	534,237	516,561	17,676	3.3	29.22
ALASKA	0	0	0	.	.
ARIZONA	74,112	74,112	0	0.0	.
ARKANSAS	538,618	532,743	5,875	1.1	90.68
CALIFORNIA	294,208	0	294,208	100.0	0.00
COLORADO	891,857	877,380	14,477	1.6	60.61
CONNECTICUT	0	0	0	.	.
DELAWARE	0	0	0	.	.
DISTRICT OF COLUMBIA	42,380	0	42,380	100.0	0.00
FLORIDA	2,266,527	2,266,527	0	0.0	.
GEORGIA	0	0	0	.	.
HAWAII	0	0	0	.	.
IDAHO	0	0	0	.	.
ILLINOIS	0	0	0	.	.
INDIANA	604,074	518,484	85,590	14.2	6.06
IOWA	0	0	0	.	.
KANSAS	0	0	0	.	.
KENTUCKY	0	0	0	.	.
LOUISIANA	0	0	0	.	.
MAINE	0	0	0	.	.
MARYLAND	99,871	59,332	40,539	40.6	1.46
MASSACHUSETTS	0	0	0	.	.
MICHIGAN	3,533,196	2,592,386	940,810	26.6	2.76
MINNESOTA	0	0	0	.	.
MISSISSIPPI	516,805	516,564	241	0.0	2143.42
MISSOURI	0	0	0	.	.
MONTANA	0	0	0	.	.
NEBRASKA	0	0	0	.	.
NEVADA	0	0	0	.	.
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	0	0	0	.	.
NEW MEXICO	0	0	0	.	.
NEW YORK	0	0	0	.	.
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	0	0	0	.	.
OHIO	3,187,000	2,795,604	391,396	12.3	7.14
OKLAHOMA	521,673	497,272	24,401	4.7	20.38
OREGON	0	0	0	.	.
PENNSYLVANIA	1,305,771	1,305,771	0	0.0	.
RHODE ISLAND	0	0	0	.	.
SOUTH CAROLINA	21,051	0	21,051	100.0	0.00
SOUTH DAKOTA	70,259	48,071	22,188	31.6	2.17
TENNESSEE	535,028	535,028	0	0.0	.
TEXAS	1,574,624	1,367,325	207,299	13.2	6.60
UTAH	0	0	0	.	.
VERMONT	0	0	0	.	.
VIRGINIA	0	0	0	.	.
WASHINGTON	1,950,665	1,850,901	99,764	5.1	18.55
WEST VIRGINIA	0	0	0	.	.
WISCONSIN	5,317,874	5,273,044	44,830	0.8	117.62
WYOMING	0	0	0	.	.
TOTAL U.S.	$23,879,830	$21,627,105	$2,252,725	9.4	9.60
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	0	0	0	.	.
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$0	$0	$0	.	.
U.S. & OUTLYING AREAS	$23,879,830	$21,627,105	$2,252,725	9.4	9.60

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.44 -- OUTLAYS FOR VOCATIONAL EDUCATION (VEA) SECTION 140 PROGRAMS, BY AUTHORIZATION YEAR AND SOURCE OF FUNDS, AND BY PROGRAM: SCHOOL YEAR 1978-79

PROGRAM	FISCAL YEAR 1979			FISCAL YEAR 1978		
	TOTAL	NON-FEDERAL	FEDERAL	TOTAL	NON-FEDERAL	FEDERAL
SPECIAL DISADVANTAGED	20,867,248	10,112,481	10,754,767	8,900,389	2,115,552	6,784,837

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.45 -- OUTLAYS FOR SPECIAL PROGRAMS FOR DISADVANTAGED ENROLLEES UNDER (VEA) SECTION 140,
BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA:
SCHOOL YEAR 1978-79
(INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	OUTLAYS NON-FEDERAL	OUTLAYS FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	343,092	0	343,092	100.0	0.00
ALASKA	55,446	9,025	46,421	83.7	0.19
ARIZONA	189,761	39,688	150,073	79.1	0.26
ARKANSAS	155,637	9,276	146,361	94.0	0.06
CALIFORNIA	3,164,646	896,113	2,268,533	71.7	0.40
COLORADO	336,614	10,599	326,015	96.9	0.03
CONNECTICUT	453,419	193,200	260,219	57.4	0.74
DELAWARE	116,294	80,000	36,294	31.2	2.20
DISTRICT OF COLUMBIA	59,536	0	59,536	100.0	0.00
FLORIDA	5,154,452	4,613,334	541,118	10.5	8.53
GEORGIA	196,464	0	196,464	100.0	0.00
HAWAII	63,861	0	63,861	100.0	0.00
IDAHO	137,999	7,832	130,167	94.3	0.06
ILLINOIS	782,192	302,827	479,365	61.3	0.63
INDIANA	1,469,366	702,732	766,634	52.2	0.92
IOWA	343,387	145,663	197,724	57.6	0.74
KANSAS	189,507	72,131	117,376	61.9	0.61
KENTUCKY	318,677	0	318,677	100.0	0.00
LOUISIANA	1,920,380	1,523,700	396,680	20.7	3.84
MAINE	191,127	0	191,127	100.0	0.00
MARYLAND	504,826	7,760	497,066	98.5	0.02
MASSACHUSETTS	290,634	0	290,634	100.0	0.00
MICHIGAN	799,638	159,582	640,056	80.0	0.25
MINNESOTA	365,880	0	365,880	100.0	0.00
MISSISSIPPI	483,792	220,999	262,793	54.3	0.84
MISSOURI	659,655	266,255	393,400	59.6	0.68
MONTANA	0	0	0	*	*
NEBRASKA	130,720	9,938	120,782	92.4	0.08
NEVADA	95,511	42,410	53,101	55.6	0.80
NEW HAMPSHIRE	68,981	0	68,981	100.0	0.00
NEW JERSEY	1,128,904	627,759	501,145	44.4	1.25
NEW MEXICO	54,312	0	54,312	100.0	0.00
NEW YORK	606,641	0	606,641	100.0	0.00
NORTH CAROLINA	538,939	0	538,939	100.0	0.00
NORTH DAKOTA	82,960	2,949	80,011	96.4	0.04
OHIO	1,385,759	47,810	1,337,949	96.5	0.04
OKLAHOMA	269,474	56,095	213,379	79.2	0.26
OREGON	272,530	59,394	213,136	78.2	0.28
PENNSYLVANIA	993,197	87,726	905,471	91.2	0.10
RHODE ISLAND	150,692	0	150,692	100.0	0.00
SOUTH CAROLINA	382,543	14,906	367,637	96.1	0.04
SOUTH DAKOTA	12,075	0	12,075	100.0	0.00
TENNESSEE	463,908	33,902	430,006	92.7	0.08
TEXAS	570,865	866	569,999	99.8	0.00
UTAH	667,975	490,800	177,175	26.5	2.77
VERMONT	19,911	0	19,911	100.0	0.00
VIRGINIA	988,495	484,865	503,630	50.9	0.96
WASHINGTON	836,494	569,168	267,326	32.0	2.13
WEST VIRGINIA	349,945	221,950	127,995	36.6	1.73
WISCONSIN	499,059	172,722	326,337	65.4	0.53
WYOMING	95,473	44,057	51,416	53.9	0.86
TOTAL U.S.	$29,411,645	$12,228,033	$17,183,612	58.4	0.71
AMERICAN SAMOA	6,740	0	6,740	100.0	0.00
GUAM	11,021	0	11,021	100.0	0.00
PUERTO RICO	317,414	0	317,414	100.0	0.00
TRUST TERRITORY	20,817	0	20,817	100.0	0.00
VIRGIN ISLANDS	0	0	0	*	*
OUTLYING AREAS	$355,992	$0	$355,992	100.0	0.00
U.S. & OUTLYING AREAS	$29,767,637	$12,228,033	$17,539,604	58.9	0.70

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.46 -- OUTLAYS FOR VOCATIONAL EDUCATION (VEA) SECTION 150 PROGRAMS, BY AUTHORIZATION YEAR AND SOURCE OF FUNDS, AND BY PROGRAM: SCHOOL YEAR 1978-79

PROGRAM	FISCAL YEAR 1979			FISCAL YEAR 1978		
	TOTAL	NON-FEDERAL	FEDERAL	TOTAL	NON-FEDERAL	FEDERAL
EDUCATION PROGRAMS IN NON-ECONOMICALLY DEPRESSED AREAS	213,675,009	205,770,279	7,904,730	27,175,904	23,013,470	4,162,434
ANCILLARY SERVICES IN NON-ECONOMICALLY DEPRESSED AREAS	8,019,658	4,692,078	3,327,580	2,384,719	867,505	1,517,214
EDUCATION PROGRAMS IN ECONOMICALLY DEPRESSED AREAS	203,867,591	188,186,959	15,680,632	16,805,559	11,389,140	5,416,419
ANCILLARY SERVICES IN ECONOMICALLY DEPRESSED AREAS	6,354,707	4,363,431	1,991,276	915,812	342,082	573,730
1/STATE ADMINISTRATION	213,103	47,191	165,912	0	0	0
SECTION TOTAL	$432,130,068	$403,059,938	$29,070,130	$47,281,994	$35,612,197	$11,669,797

NOTE: NO SUBSECTION TABLE FOR THE FOLLOWING:
1/STATE ADMINSTRATION-- MASSACHUSETTS AND NEW MEXICO ONLY.

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.47 -- OUTLAYS FOR EDUCATION PROGRAMS IN NON-ECONOMICALLY DEPRESSED AREAS UNDER (VEA) SECTION 150, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	772,176	671,713	100,463	13.0	6.69
ALASKA	349,689	294,197	55,492	15.9	5.30
ARIZONA	4,281,667	4,090,644	191,023	4.5	21.41
ARKANSAS	181,586	165,722	15,864	8.7	10.45
CALIFORNIA	56,319,054	54,812,123	1,506,931	2.7	36.37
COLORADO	3,175,663	2,889,454	286,209	9.0	10.10
CONNECTICUT	4,201,662	4,024,866	176,796	4.2	22.77
DELAWARE	917,721	880,067	37,654	4.1	23.37
DISTRICT OF COLUMBIA	216,002	188,449	27,553	12.8	6.84
FLORIDA	703,556	445,257	258,299	36.7	1.72
GEORGIA	5,503,521	5,396,041	107,480	2.0	50.20
HAWAII	684,459	655,126	29,333	4.3	22.33
IDAHO	1,096,752	1,013,220	83,532	7.6	12.13
ILLINOIS	10,448,867	8,842,596	1,606,271	15.4	5.51
INDIANA	2,416,465	2,126,181	290,284	12.0	7.32
IOWA	3,467,209	3,160,462	306,747	8.8	10.30
KANSAS	403,998	388,010	15,988	4.0	24.27
KENTUCKY	2,927,834	2,717,323	210,511	7.2	12.91
LOUISIANA	3,392,690	2,847,435	545,255	16.1	5.22
MAINE	0	0	0	.	.
MARYLAND	10,666,622	10,210,121	456,501	4.3	22.37
MASSACHUSETTS	4,037,319	3,962,052	75,267	1.9	52.64
MICHIGAN	18,533,143	17,744,560	788,583	4.3	22.50
MINNESOTA	2,608,763	2,377,476	231,287	8.9	10.28
MISSISSIPPI	5,089,951	4,643,318	446,633	8.8	10.40
MISSOURI	3,453,378	3,100,042	353,336	10.2	8.77
MONTANA	0	0	0	.	.
NEBRASKA	1,409,708	1,310,095	99,613	7.1	13.15
NEVADA	901,408	841,904	59,504	6.6	14.15
NEW HAMPSHIRE	823,614	752,400	71,214	8.6	10.57
NEW JERSEY	2,475,731	1,891,930	583,801	23.6	3.24
NEW MEXICO	602,271	570,771	31,500	5.2	18.12
NEW YORK	32,857	0	32,857	100.0	0.00
NORTH CAROLINA	8,146,516	7,985,682	160,834	2.0	49.65
NORTH DAKOTA	1,069,286	1,017,971	51,315	4.8	19.84
OHIO	20,898,344	20,739,215	159,129	0.8	130.33
OKLAHOMA	0	0	0	.	.
OREGON	249,526	103,165	146,361	58.7	0.70
PENNSYLVANIA	1,499,349	1,249,897	249,452	16.6	5.01
RHODE ISLAND	538,875	525,079	13,796	2.6	38.06
SOUTH CAROLINA	0	0	0	.	.
SOUTH DAKOTA	1,733,014	1,666,820	66,194	3.8	25.18
TENNESSEE	3,023,643	2,790,872	232,771	7.7	11.99
TEXAS	13,934,871	13,672,604	262,267	1.9	52.13
UTAH	377,937	293,167	84,770	22.4	3.46
VERMONT	767,400	718,072	49,328	6.4	14.56
VIRGINIA	8,738,769	8,332,562	406,207	4.6	20.51
WASHINGTON	16,850,539	16,556,733	293,806	1.7	56.35
WEST VIRGINIA	847,443	776,023	71,420	8.4	10.87
WISCONSIN	3,723,008	3,483,578	239,430	6.4	14.55
WYOMING	1,183,331	1,140,154	43,177	3.6	26.41
TOTAL U.S.	$235,757,267	$224,065,227	$11,692,040	5.0	19.16
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	5,093,646	4,718,522	375,124	7.4	12.58
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$5,093,646	$4,718,522	$375,124	7.4	12.58
U.S. & OUTLYING AREAS	$240,850,913	$228,783,749	$12,067,164	5.0	18.96

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.48 -- OUTLAYS FOR ANCILLARY SERVICES IN NON-ECONOMICALLY DEPRESSED AREAS UNDER (VEA) SECTION 150, BY SOURCE OF FUNDS, AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79

(INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS TOTAL	 NON-FEDERAL	 FEDERAL	FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
ALABAMA	0	0	0	.	.
ALASKA	0	0	0	.	.
ARIZONA	172,688	62,346	110,342	63.9	0.57
ARKANSAS	420	240	180	42.9	1.33
CALIFORNIA	2,968,646	1,953,117	1,015,529	34.2	1.92
COLORADO	192,425	146,117	46,308	24.1	3.16
CONNECTICUT	124,713	22,695	102,018	81.8	0.22
DELAWARE	3,027	0	3,027	100.0	0.00
DISTRICT OF COLUMBIA	0	0	0	.	.
FLORIDA	136,940	4,962	131,978	96.4	0.04
GEORGIA	102,564	48,173	54,391	53.0	0.89
HAWAII	43,816	43,816	0	0.0	.
IDAHO	219,139	205,352	13,787	6.3	14.89
ILLINOIS	0	0	0	.	.
INDIANA	141,623	60,633	80,990	57.2	0.75
IOWA	60,559	23,059	37,500	61.9	0.61
KANSAS	272,514	125,003	147,511	54.1	0.85
KENTUCKY	99,218	50,252	48,966	49.4	1.03
LOUISIANA	0	0	0	.	.
MAINE	176,165	32,441	143,724	81.6	0.23
MARYLAND	278,384	110,344	168,040	60.4	0.66
MASSACHUSETTS	78,580	61,580	17,000	21.6	3.62
MICHIGAN	262,319	98	262,221	100.0	0.00
MINNESOTA	1,071,796	1,021,315	50,481	4.7	20.23
MISSISSIPPI	0	0	0	.	.
MISSOURI	75,785	5,622	70,163	92.6	0.08
MONTANA	0	0	0	.	.
NEBRASKA	188,629	154,065	34,564	18.3	4.46
NEVADA	32,826	29,494	3,332	10.2	8.85
NEW HAMPSHIRE	43,243	0	43,243	100.0	0.00
NEW JERSEY	163,284	13,119	150,165	92.0	0.09
NEW MEXICO	0	0	0	.	.
NEW YORK	130,487	100,000	30,487	23.4	3.28
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	153,945	136,591	17,354	11.3	7.87
OHIO	118,056	33,093	84,963	72.0	0.39
OKLAHOMA	0	0	0	.	.
OREGON	49,114	0	49,114	100.0	0.00
PENNSYLVANIA	370,157	23,150	347,007	93.7	0.07
RHODE ISLAND	108,031	108,031	0	0.0	.
SOUTH CAROLINA	0	0	0	.	.
SOUTH DAKOTA	175,369	134,460	40,909	23.3	3.29
TENNESSEE	113,222	77,655	35,567	31.4	2.18
TEXAS	457,204	0	457,204	100.0	0.00
UTAH	353,097	163,639	189,458	53.7	0.86
VERMONT	44,538	33,676	10,862	24.4	3.10
VIRGINIA	438,075	203,457	234,618	53.6	0.87
WASHINGTON	487,105	119,652	367,453	75.4	0.33
WEST VIRGINIA	73,440	8,440	65,000	88.5	0.13
WISCONSIN	154,235	88,542	65,693	42.6	1.35
WYOMING	24,167	12,084	12,083	50.0	1.00
TOTAL U.S.	$10,159,545	$5,416,313	$4,743,232	46.7	1.14
AMERICAN SAMOA	0	0	0	.	.
GUAM	0	0	0	.	.
PUERTO RICO	244,832	143,270	101,562	41.5	1.41
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$244,832	$143,270	$101,562	41.5	1.41
U.S. & OUTLYING AREAS	$10,404,377	$5,559,583	$4,844,794	46.6	1.15

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.69 -- OUTLAYS FOR EDUCATION PROGRAMS IN ECONOMICALLY DEPRESSED AREAS UNDER (VEA) SECTION 150, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79
(INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	5,904,931	5,271,061	633,870	10.7	8.32
ALASKA	51,986	18,390	33,596	64.6	0.55
ARIZONA	404,612	260,901	143,711	35.5	1.82
ARKANSAS	4,762,081	4,331,418	430,663	9.0	10.06
CALIFORNIA	15,067,610	12,949,934	2,117,676	14.1	6.12
COLORADO	1,815,406	1,601,936	213,470	11.8	7.50
CONNECTICUT	2,141,174	1,934,238	206,936	9.7	9.35
DELAWARE	680,993	632,693	48,300	7.1	13.10
DISTRICT OF COLUMBIA	141,104	68,674	72,430	51.3	0.95
FLORIDA	16,471,126	15,789,358	681,768	4.1	23.16
GEORGIA	6,058,511	5,426,665	631,846	10.4	8.59
HAWAII	472,132	365,646	106,486	22.6	3.43
IDAHO	709,277	632,981	76,296	10.8	8.30
ILLINOIS	4,407,116	4,151,398	255,718	5.8	16.23
INDIANA	3,630,811	3,091,631	539,180	14.9	5.73
IOWA	1,411,691	1,323,868	87,823	6.2	15.07
KANSAS	4,040,155	3,799,318	240,837	6.0	15.78
KENTUCKY	5,737,991	5,297,578	440,413	7.7	12.03
LOUISIANA	4,257,647	3,923,666	333,981	7.8	11.75
MAINE	1,668,145	1,591,023	77,122	4.6	20.63
MARYLAND	5,452,849	5,061,988	390,861	7.2	12.95
MASSACHUSETTS	10,870,791	10,499,439	371,352	3.4	28.27
MICHIGAN	897,148	157,784	739,364	82.4	0.21
MINNESOTA	2,132,486	1,827,364	305,122	14.3	5.99
MISSISSIPPI	257,404	25,598	231,806	90.1	0.11
MISSOURI	4,778,874	4,354,550	424,324	8.9	10.26
MONTANA	0	0	0	.	.
NEBRASKA	1,140,432	978,993	161,439	14.2	6.06
NEVADA	143,887	112,566	31,321	21.8	3.59
NEW HAMPSHIRE	1,029,180	957,600	71,580	7.0	13.38
NEW JERSEY	3,238,550	2,652,238	586,312	18.1	4.52
NEW MEXICO	2,473,460	2,283,082	190,378	7.7	11.99
NEW YORK	12,668,702	10,018,178	2,650,524	20.9	3.78
NORTH CAROLINA	5,509,455	4,476,780	1,032,675	18.7	4.34
NORTH DAKOTA	641,263	554,121	87,142	13.6	6.36
OHIO	30,298,924	29,218,416	1,080,508	3.6	27.04
OKLAHOMA	4,989,407	4,653,679	335,728	6.7	13.86
OREGON	296,285	120,324	175,961	59.4	0.68
PENNSYLVANIA	1,411,186	609,476	801,710	56.8	0.76
RHODE ISLAND	1,956,199	1,873,625	82,574	4.2	22.69
SOUTH CAROLINA	5,043,243	4,620,111	423,132	8.4	10.92
SOUTH DAKOTA	325,475	271,833	53,642	16.5	5.07
TENNESSEE	14,994,899	13,647,095	1,347,804	9.0	10.13
TEXAS	18,813,416	18,373,866	439,550	2.3	41.80
UTAH	299,422	204,625	94,797	31.7	2.16
VERMONT	405,271	366,544	38,727	9.6	9.46
VIRGINIA	3,958,317	3,667,069	291,248	7.4	12.59
WASHINGTON	391,011	48,145	342,866	87.7	0.14
WEST VIRGINIA	2,915,196	2,665,560	249,636	8.6	10.68
WISCONSIN	1.231,871	750,779	481,092	39.1	1.56
WYOMING	31,876	2,930	28,946	90.8	0.10
TOTAL U.S.	$218,430,978	$197,516,735	$20,914,243	9.6	9.44
AMERICAN SAMOA	51,896	36,880	15,016	28.9	2.46
GUAM	337	0	337	100.0	0.00
PUERTO RICO	2,189,939	2,022,484	167,455	7.6	12.08
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$2,242,172	$2,059,364	$182,808	8.2	11.27
U.S. & OUTLYING AREAS	$220,673,150	$199,576,099	$21,097,051	9.6	9.46

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 7.50 -- OUTLAYS FOR ANCILLARY SERVICES IN ECONOMICALLY DEPRESSED AREAS UNDER (VEA) SECTION 150, BY SOURCE OF FUNDS AND BY STATE OR OUTLYING AREA: SCHOOL YEAR 1978-79 (INCLUDES CARRYOVER)

STATE OR OUTLYING AREA	OUTLAYS			FEDERAL AS PERCENT OF TOTAL	RATIO OF NON-FEDERAL TO FEDERAL
	TOTAL	NON-FEDERAL	FEDERAL		
ALABAMA	0	0	0	.	.
ALASKA	0	0	0	.	.
ARIZONA	15,350	0	15,350	100.0	0.00
ARKANSAS	11,410	6,530	4,880	42.8	1.34
CALIFORNIA	0	0	0	.	.
COLORADO	0	0	0	.	.
CONNECTICUT	615	0	615	100.0	0.00
DELAWARE	54,967	35,940	19,027	34.6	1.89
DISTRICT OF COLUMBIA	82,801	54,490	28,311	34.2	1.92
FLORIDA	2,179,014	2,012,346	166,668	7.6	12.07
GEORGIA	344,973	137,823	207,150	60.0	0.67
HAWAII	0	0	0	.	.
IDAHO	6,049	3,327	2,722	45.0	1.22
ILLINOIS	0	0	0	.	.
INDIANA	44,085	0	44,085	100.0	0.00
IOWA	169,520	70,218	99,302	58.6	0.71
KANSAS	96,281	83,644	12,637	13.1	6.62
KENTUCKY	207,574	105,131	102,443	49.4	1.03
LOUISIANA	0	0	0	.	.
MAINE	11,873	0	11,873	100.0	0.00
MARYLAND	159,154	79,964	79,190	49.8	1.01
MASSACHUSETTS	180,187	163,187	17,000	9.4	9.60
MICHIGAN	5,149	0	5,149	100.0	0.00
MINNESOTA	675,070	612,454	62,616	9.3	9.78
MISSISSIPPI	0	0	0	.	.
MISSOURI	104,656	7,764	96,892	92.6	0.08
MONTANA	0	0	0	.	.
NEBRASKA	33,276	14,033	19,243	57.8	0.73
NEVADA	1,668	0	1,668	100.0	0.00
NEW HAMPSHIRE	0	0	0	.	.
NEW JERSEY	0	0	0	.	.
NEW MEXICO	0	0	0	.	.
NEW YORK	0	0	0	.	.
NORTH CAROLINA	0	0	0	.	.
NORTH DAKOTA	0	0	0	.	.
OHIO	420,812	8,141	412,671	98.1	0.02
OKLAHOMA	629,658	381,581	248,077	39.4	1.54
OREGON	48,874	0	48,874	100.0	0.00
PENNSYLVANIA	197,754	139,091	58,663	29.7	2.37
RHODE ISLAND	38,739	29,595	9,144	23.6	3.24
SOUTH CAROLINA	452,363	204,743	247,620	54.7	0.83
SOUTH DAKOTA	0	0	0	.	.
TENNESSEE	499,924	333,775	166,149	33.2	2.01
TEXAS	151,940	0	151,940	100.0	0.00
UTAH	0	0	0	.	.
VERMONT	15,200	0	15,200	100.0	0.00
VIRGINIA	116,282	57,775	58,507	50.3	0.99
WASHINGTON	0	0	0	.	.
WEST VIRGINIA	2,000	0	2,000	100.0	0.00
WISCONSIN	183,976	100,356	83,620	45.5	1.20
WYOMING	3,980	1,990	1,990	50.0	1.00
TOTAL U.S.	$7,145,174	$4,643,898	$2,501,276	35.0	1.86
AMERICAN SAMOA	3,612	0	3,612	100.0	0.00
GUAM	0	0	0	.	.
PUERTO RICO	121,733	61,615	60,118	49.4	1.02
TRUST TERRITORY	0	0	0	.	.
VIRGIN ISLANDS	0	0	0	.	.
OUTLYING AREAS	$125,345	$61,615	$63,730	50.8	0.97
U.S. & OUTLYING AREAS	$7,270,519	$4,705,513	$2,565,006	35.3	1.83

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

Chapter 8

Student Choice of Program

Vocational education serves diverse needs of young people and adults interested in gaining or improving occupational skills. In addition to considering the institutional factors associated with program operation, such as facilities, staff, and financial support, it is useful for those planning and offering programs to view vocational education as it is perceived by students. Of particular interest are the aspirations of students for vocational education and their reasons for selecting programs. The picture that emerges from a review of the students' perspective is a remarkable constancy in students' perceived needs for vocational education, together with distinct profiles of choice of field depending on each student's situation and prior experiences. The differences in choice profiles by program area suggest that different student groups are served by different types of vocational education. These profiles also suggest the present extent of flexibility in student demand for vocational education and program areas where demographic and social factors may provide some stimulus for growth.

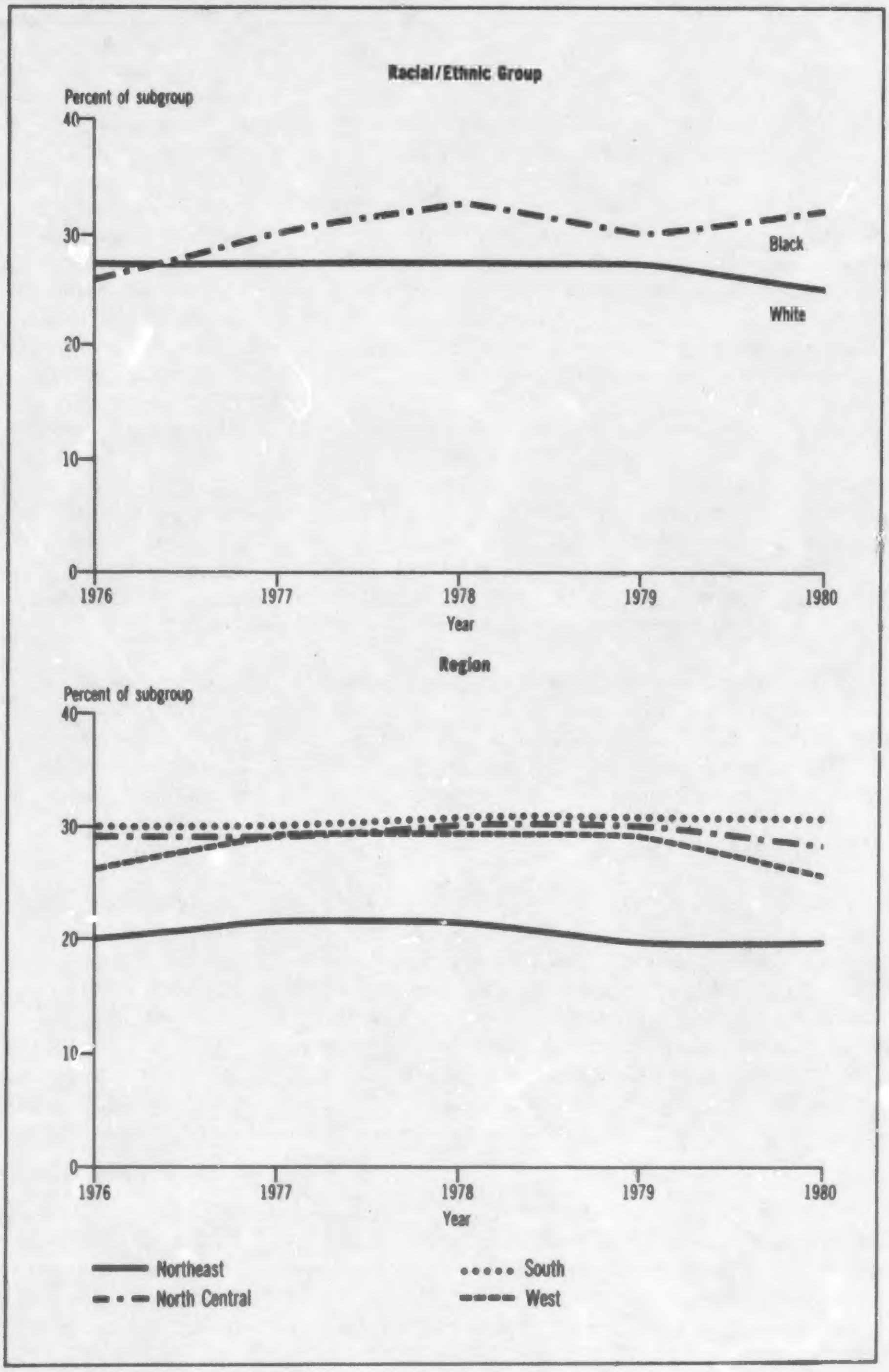
A steady share of high school seniors have aspirations to attend technical or vocational schools. In 1980, 26.8 percent of all high school seniors expressed such a desire, compared with 28.4 in 1978 and 27.0 in 1976 (table 8.1). Aspirations differ slightly between the sexes, with more males than females hoping to secure vocational training, by a margin of about five percentage points. Racial groups differ from each other in aspirations, with blacks showing increasing interest in vocational education over time (chart 8.1). In 1980, more blacks than whites were expressing hopes of vocational training. The only readily apparent regional difference in aspirations for vocational education was a lesser interest among seniors in the Northeast compared with other regions of the country. A difference of up to eight percentage points has consistently set this group apart from the others.

Comparisons of these aspirations with plans provide insights into students' views of accessibility and likelihood of attaining their first choices of educational opportunities. Somewhat larger percentages of many of the population subgroups examined earlier said that they definitely or probably would attend technical or vocational school (table 8.2). These larger shares may reveal that vocational education is a second choice for many young people whose first hope is to graduate from college. In many cases, the addition of this group to those having a first preference for vocational training raises by two or three percentage points the share of the population subgroups that plan to attend technical or vocational school.

When the population of high school seniors is grouped by high school program, much greater differences among subgroups in aspirations and plans are evident than were noted as a result of sex, race/ethnic, or regional groupings. High school curriculum appears to be a much more dominant variable in explaining later choices. While 19.3 percent of all seniors in 1972 indicated as a first choice they would like to attend vocational or technical school (students were asked in this instance to select only one choice), the responses by subgroup varied considerably. Only 7.1 percent of students in an academic curriculum made this choice compared with 40.9 percent of those in a vocational curriculum (table 8.3). In comparing aspirations to plans for this group, it is evident that many students did not expect to pursue educational activities even though they would have liked to do so. Over 36 percent of the students in a vocational curriculum stated that they did not expect to go further than high school in educational attainment.

Immediate plans of high school seniors included work as well as training. Almost 25 percent of students in vocational curriculums expected to take vocational or technical courses at vocational schools or junior or community colleges or begin on-the-job training during the following year. However, an even larger share – more than 46 percent – intended to work full time. Another 11 percent planned to pursue academic course work. This pattern contrasts with that for all seniors: 17 percent planned to pursue vocational studies through some means, 44 percent planned academic course work, and 25 percent intended to work full time.

Chart 8.1
High School Seniors Aspiring to Attend Technical or Vocational School



SOURCE: Table 8.1

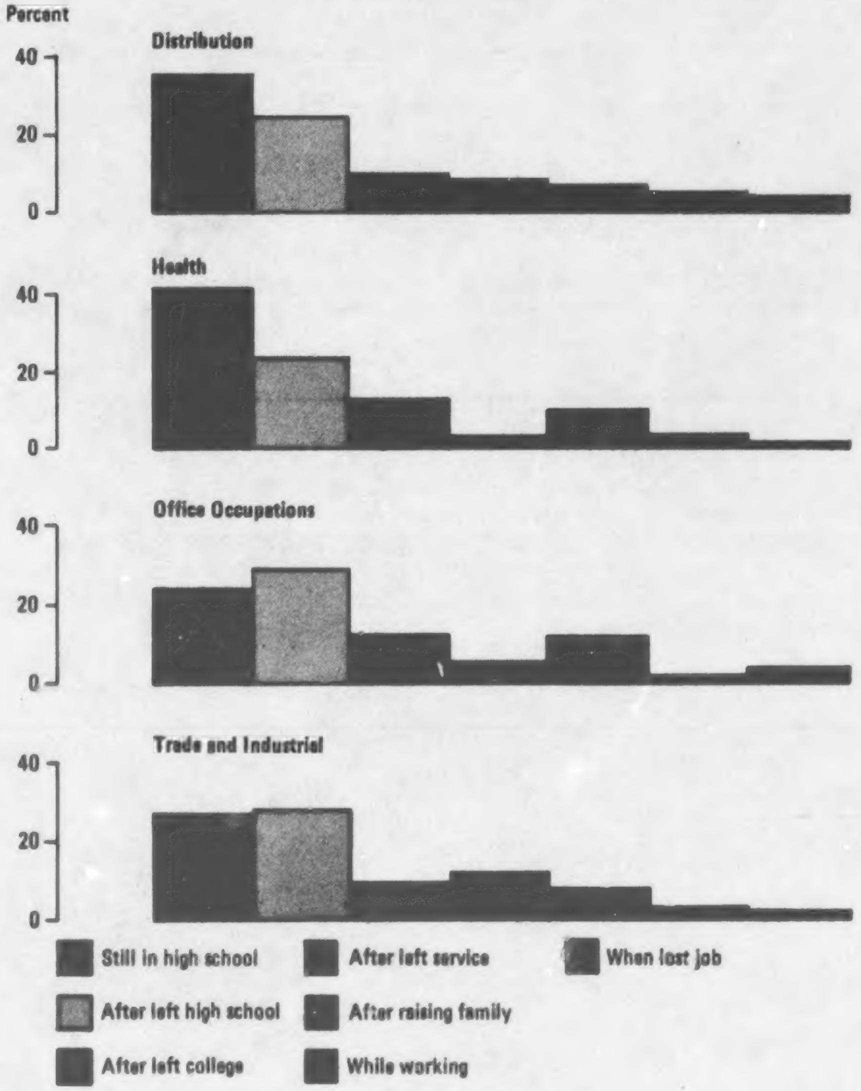
Access to vocational education appears to be at least one major reason for students' entering vocational education when they do. Among students in occupational programs in noncollegiate postsecondary schools, lack of training offerings in high school was cited by between 33.1 and 46.6 percent of students in the various program areas as their reason for not taking vocational training while in high school (table 8.4). For some occupational areas, a sizeable proportion of students had been enrolled in college preparatory courses during high school; those training in the Health program area were most likely to cite this reason for postponing vocational training (44.3 percent). Smaller proportions of students in other areas had been enrolled in college preparatory courses -- 10.0 percent of those in Home Economics, 14.7 percent of those in Trade and Industrial programs.

Further examination of the timing of choice of vocational training suggests that choices vary for those students enrolled in different areas of training in noncollegiate postsecondary schools. Students entering Agriculture and Health programs made their decisions early (chart 8.2 and table 8.5). Almost half, 49.0 percent, of those in Agriculture decided to enter that field when they were in high school. A high percentage of those in Health, 40.2 percent, also made their choice at that time. For the large enrollment areas of Office Occupations and Trade and Industrial, more students made their choice of field right after leaving high school than while they were still enrolled. Three of the program areas appear to be avenues to labor force reentry for persons who left (or never entered) the labor force in order to rear families. In the Health, Home Economics, and Office Occupations program areas, all areas where a sizeable majority of students are female, a larger percentage of students indicated they made their choice of area after raising a family than selected the area after leaving college or military service.

Reasons for program selection as well as timing of choice are of interest. In three of the vocational education program areas more than half of the students gave as the reason for their choice that they "always wanted to" enter that field (table 8.6). Agriculture (66.4 percent), Health (57.1 percent), and Home Economics (59.3 percent) were those areas where preferences were formed earliest. Other areas had smaller, but substantial, proportions of students who reported early interest in their fields: 43.6 percent in Distribution, 32.4 percent in Office Occupations, 40.0 percent in Technical, and 48.0 percent in Trade and Industrial.

Much smaller numbers of students entered those fields because of reading about them or through school advertisements. The one area where school publicity appeared to make the greatest difference, Office Occupations, was chosen by 24.4 percent of students. Personal contacts contributed even smaller percentages of enrollments, with family or friends cited more frequently than teachers or counselors. The single exception to family or friends as the most important influencing factor occurred in the Distribution area, where 11.0 percent cited a teacher or counselor as their reason for selecting their program, compared with 8.8 percent who listed a family member or friend.

Chart 8.2
Timing of Choice of School for Noncollegiate Postsecondary School Students in Selected Occupational Programs, 1979



SOURCE: Table 8.5

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Table 8.1
Aspirations of high school seniors to attend technical or vocational schools, by sex, race, and region: 1976 to 1980

Item	1976	1977	1978	1979	1980
"Suppose you could do just what you'd like and nothing stood in your way. Would you want to attend a technical or vocational school?":					
			Percent		
Total	27.0	27.7	28.4	27.9	26.8
Sex					
Male	29.1	30.3	30.6	30.6	29.6
Female	24.8	25.3	26.1	21.1	24.0
Race					
White	27.1	27.1	27.2	27.4	25.8
Black	26.0	30.2	33.9	30.2	32.1
Region					
Northeast	20.6	22.0	22.3	20.2	20.2
North Central	29.1	29.4	30.2	30.5	28.2
South	29.3	29.4	30.5	30.3	30.4
West	27.8	29.9	29.7	29.5	25.9

SOURCE: The University of Michigan, Institute for Social Research, Monitoring the Future, 1976, 1977, 1978, 1980.

Table 8.2
Plans of high school seniors to attend a technical or vocational school after high school, by sex, race, and region: 1976 to 1978

Year and plans	Sex		Race		Region			
	Male	Female	White	Black	North-east	North Central	South	West
"How likely is it that after high school you will . . . attend a technical or vocational school?" :								
	Percentage distribution							
1976								
Definitely will	8.6	7.8	8.0	9.9	6.9	9.0	9.0	6.9
Probably will	20.1	16.8	17.2	25.5	12.3	18.5	21.8	21.9
Probably won't	35.6	30.1	33.7	29.4	26.6	33.8	33.2	38.8
Definitely won't	35.7	45.3	41.2	35.2	54.1	38.7	36.0	32.4
1977								
Definitely will	9.6	8.3	8.4	12.4	8.4	8.4	9.7	9.5
Probably will	20.0	16.5	16.3	27.4	12.8	19.1	20.5	21.0
Probably won't	32.2	28.9	31.4	24.8	25.5	31.4	30.7	36.3
Definitely won't	38.2	46.4	43.8	35.4	53.3	41.1	39.1	33.3
1978								
Definitely will	9.2	8.6	8.2	12.9	7.6	9.1	9.1	10.2
Probably will	21.7	16.8	8.2	26.5	13.6	19.6	22.0	22.1
Probably won't	30.9	28.4	30.3	25.9	23.8	31.0	30.3	35.5
Definitely won't	38.2	46.2	43.7	34.7	55.0	40.3	38.6	32.2

SOURCE: Institute for Social Research, The University of Michigan, Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors, 1976, 1977, 1978.

Table 8.3
Plans of high school seniors for the year after high school, by high school program: 1972

Plans	All students	High school program		
		Academic	General	Vocational
	Weighted percentage distribution of students			
Total	100.0	100.0	100.0	100.0
Working full-time	25.6	8.6	33.3	46.6
Entering an apprenticeship or on-the-job training program	2.8	1.2	4.7	3.6
Going into regular military service (or service academy)	3.5	2.3	4.8	4.2
Being a full-time homemaker	2.8	0.9	3.9	4.7
Taking vocational or technical courses at a trade or business school full-time or part-time	9.1	4.7	11.0	14.9
Taking academic courses at a junior or community college full-time or part-time	10.8	13.6	10.9	5.3
Taking technical or vocational subjects at a junior or community college full-time or part-time	5.4	4.9	5.8	6.0
Attending a four-year college or university full-time or part-time	33.6	60.4	16.7	6.5
Working part-time, but not attending school or college	2.1	1.0	3.1	2.7
Other (travel, take a break, no plans)	4.1	2.3	5.7	5.4

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Student Questionnaire and Test Results by Sex, High School Program, Ethnic Category, and Father's Education, 1975.

Table 8.4
Reasons for not taking vocational training in high school of students in noncollegiate postsecondary schools with occupational programs, by area of current program: 1979

Reason	Area of Current Program							
	Total	Agriculture	Distribution	Health	Occupational home economics	Office occupations	Technical	Trade and industrial
	Percentage distribution							
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
School did not offer any training	40.15	40.08	33.05	33.05	46.64	40.21	40.77	43.71
Taking college prep course	23.80	16.90	23.14	44.33	9.89	22.68	25.56	14.73
Was not interested	19.47	16.01	24.83	14.19	9.54	20.37	21.70	20.62
Could not arrange schedule	6.27	14.21	4.01	3.77	4.59	7.59	5.28	7.00
Wanted to postpone after high school	4.99	3.97	10.88	2.49	6.95	4.55	2.96	6.46
Did not offer desired program	1.36	1.54	2.26	.71	4.71	1.47	1.45	1.48
Other	.99	3.59		.34		1.13	.38	1.41
Not reported	2.96	3.71	1.83	1.11	17.67	2.00	1.90	4.59

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations.

Table 8.5
Timing of choice of school for students in noncollegiate postsecondary schools with occupational programs, by area of program: 1979

Timing of decision	Area of current program							
	Total	Agriculture	Distribution	Health	Occupational home economics	Office occupations	Technical	Trade and industrial
	Percentage distribution							
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Still in high school	28.80	49.04	35.64	40.21	26.12	23.95	29.28	26.67
After left high school	26.52	21.50	24.47	22.42	38.56	29.34	22.92	27.13
After left college	11.22	11.18	9.47	13.33	6.72	12.45	11.75	9.47
After left service	8.70	6.09	8.09	2.71	4.85	5.19	17.47	11.91
After raising family	9.23	1.26	6.10	9.84	10.45	11.50	3.15	8.96
While working	3.09	.20	5.67	2.14	3.61	2.96	2.42	3.60
Loss of spouse support	1.64	.96	1.04	1.16	2.61	2.91	.41	1.24
After injury/disabled	.89	5.14	.75	.36	0	1.14	.53	.98
When lost job	2.97	.30	3.58	1.20	1.31	3.70	4.11	2.97
Other	4.05	1.46	2.59	5.24	4.35	3.72	4.64	3.77
Not reported	2.90	2.87	2.59	1.40	1.43	3.14	3.32	3.30

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations.

Table 8.6
Reasons for selection of program for students in noncollegiate postsecondary schools with occupational programs, by area of program: 1979

Factor for selection	Area of current program							
	Total	Agriculture	Distribution	Health	Occupational home economics	Office occupations	Technical	Trade and industrial
	Percentage distribution							
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Family/friend	13.95	9.67	8.77	14.38	12.00	14.92	13.10	13.65
Teacher/counselor	6.31	.86	10.98	2.84	6.03	9.34	5.81	5.52
Someone else	9.11	4.73	7.29	7.98	2.86	8.46	9.14	10.26
Always wanted to	44.32	66.41	43.57	57.06	59.27	32.41	40.03	48.01
Need more training	5.14	4.83	9.42	3.06	3.11	5.60	7.20	4.99
Read about field	15.28	11.08	12.64	11.28	10.32	20.43	19.55	12.63
School advertisements	2.35	.96	2.43	1.01	3.73	3.95	1.83	1.90
Wanted better job	1.78	1.06	1.47	.85	1.31	2.68	1.99	1.53
Other	.71	.20	1.06	.47	1.37	1.14	.42	.53
Not reported	1.05	.20	2.38	1.07	0	1.07	.93	.98

NOTE: Details may not dd to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations.

Chapter 9

Costs Facing Vocational Students

Vocational education imposes costs of time and, in some cases, money or geographic relocation on students. These costs are as diverse for vocational education students as are the institutions offering the programs and the areas in which training is available. Because costs necessarily are a factor of access, it is appropriate to assess the types of costs and the programs or institutional settings in which they occur.

A major investment required of vocational education students, as of other students, is time. Profiles of high school students by their curriculum show that students in each of the three hign school programs — general, academic, and vocational — spend some time each week in both academic and vocational instruction. Yet the allocations between academic and vocational instruction are distinct for students in the three programs. Vocational students spend on average between 5 and 7 hours per week in vocational instruction, compared with the 1 to 2 hours per week spent in vocational instruction by academic students (chart 9.1 and table 9.1). Vocational students also spend fewer hours in academic instruction each week than do academic students, by 2 to 4 hours. As has been observed earlier, high school program, in many instances, defines groups with stronger similarities than do sex, race, or other demographic characteristics. In this case, high school program is again more relevant in describing a student's weekly activity than are other student characteristics.

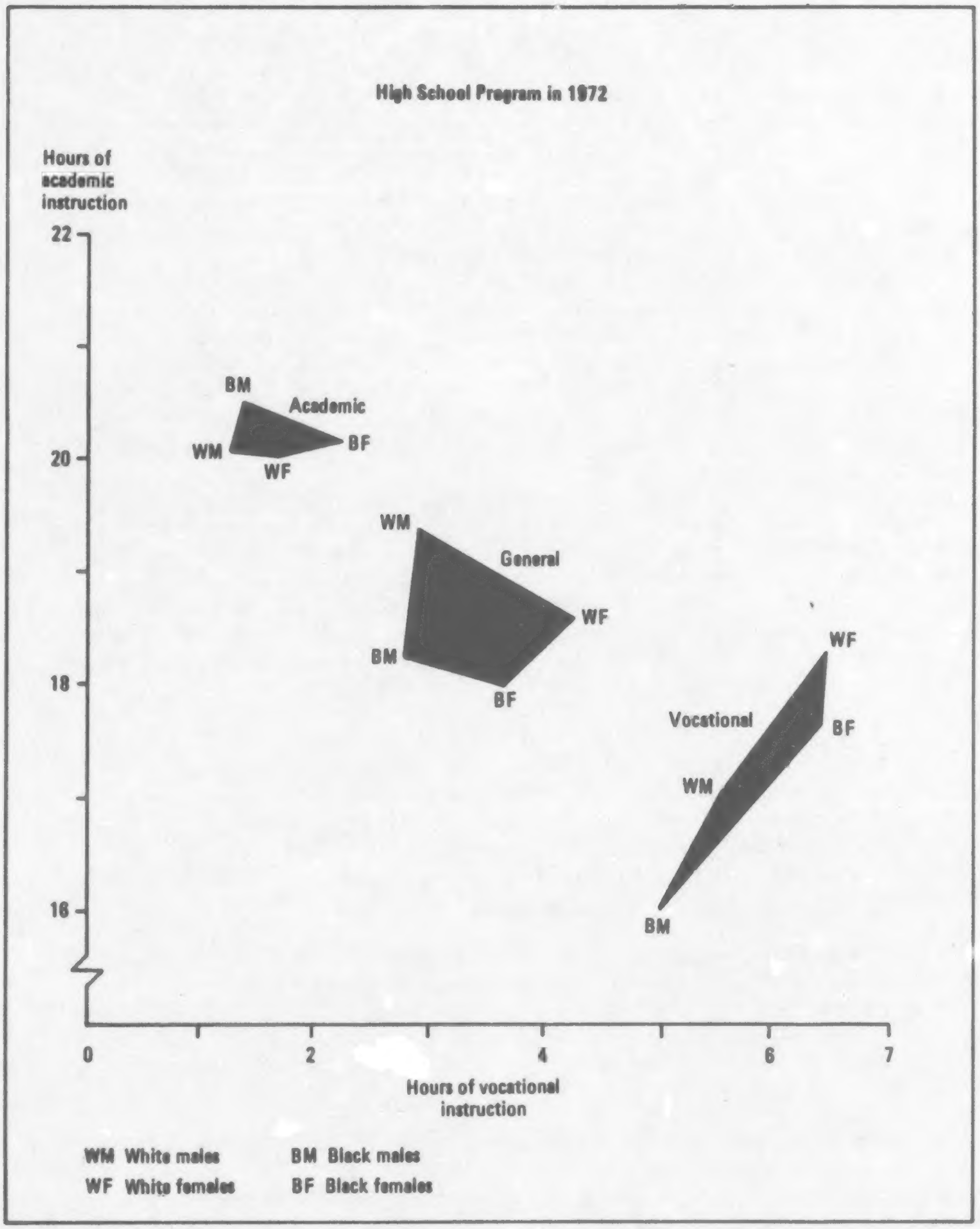
Postsecondary vocational programs vary considerably in time required, both on a weekly basis and over a calendar period. Some program areas display a range of class times. The Distribution, Office Occupations, and Technical areas require less than 20 hours per week for 20 percent or more of these programs offered in noncollegiate postsecondary schools (chart 9.2 and table 9.2). Health, Occupational Home Economics, and Trade and Industrial areas, by comparison, require at least 30 hours weekly in over 65 percent of their programs. The most demanding areas in terms of hours per week of studying required are Health and Agriculture.

The elapsed time required for noncollegiate programs is again dependent upon program areas. Furthermore, the differences in average instructional time by program areas for public as compared to private schools suggest that these institutions offer quite different training opportunities. For example, the average length in hours for Distribution programs is 999 for public schools, only 327 for private. Yet for Health programs, averages are 1,214 for public schools, 1,977 for private (table 9.3). The shorter programs tend to be in Office Occupations and Occupational Home Economics, while programs in Heath and in Trade and Industrial areas require more time.

While much, if not all, of secondary instruction is available free of charge, postsecondary students are usually required to pay for vocational training. Cost differentials between public and private schools are notable. For noncollegiate postsecondary schools, average program charges were $1,616 for private schools and only $345 for public schools (chart 9.3 and table 9.3). Programs in Agriculture and Technical areas were most expensive in private schools, while Health and Technical programs were most expensive in public schools.

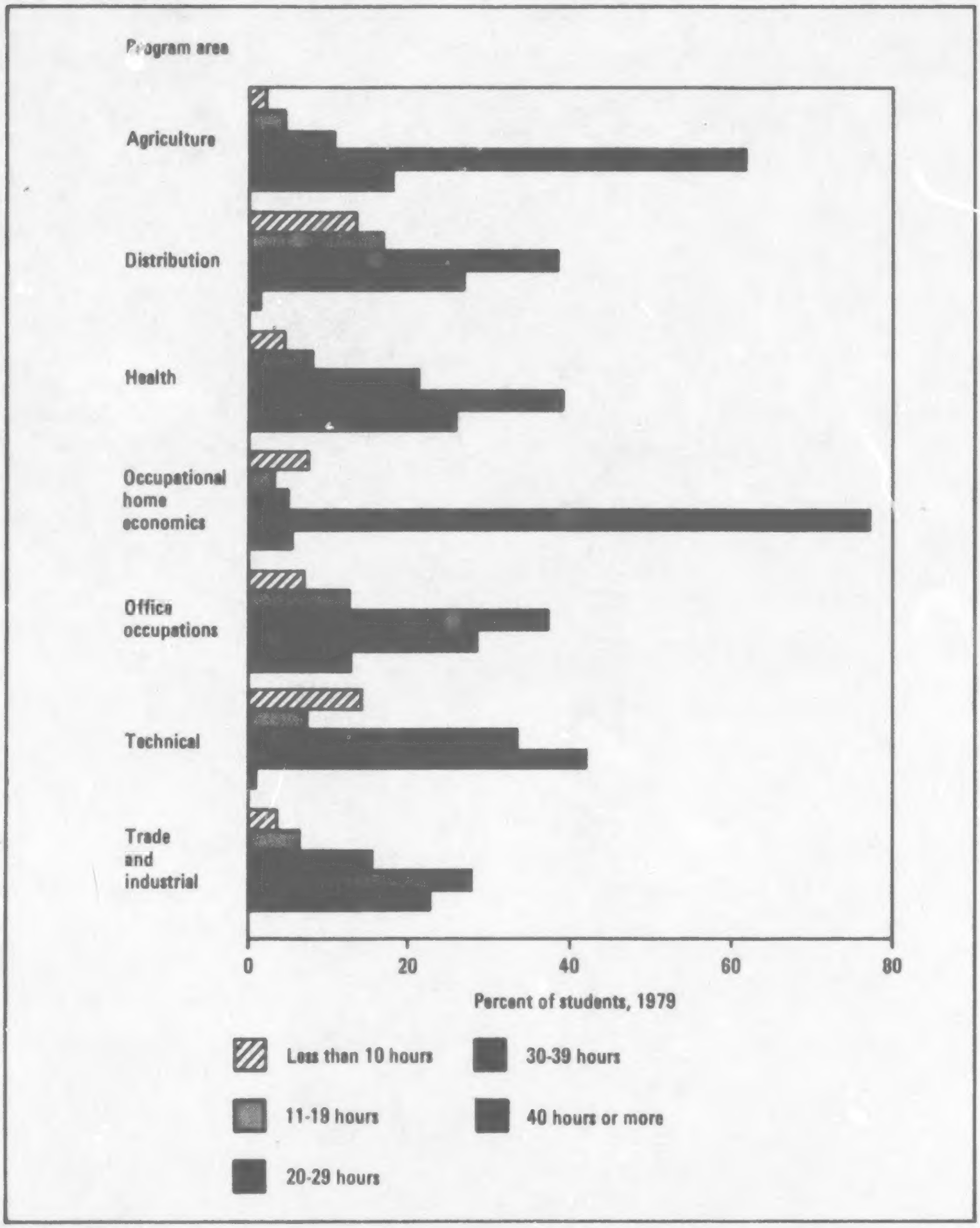
It would be particularly instructive to compare these charges with those of other provider institutions, especially the 2-year and 4-year institutions of higher education. However, such comparisons are not valid because they would presume comparability of programs from one institutional type to another that does not exist. Even similar program choices could result in distinct course patterns in different institutions. Noting the

Chart 9.1
Hours of Academic and Vocational Instruction, by High School Program, Race, and Sex



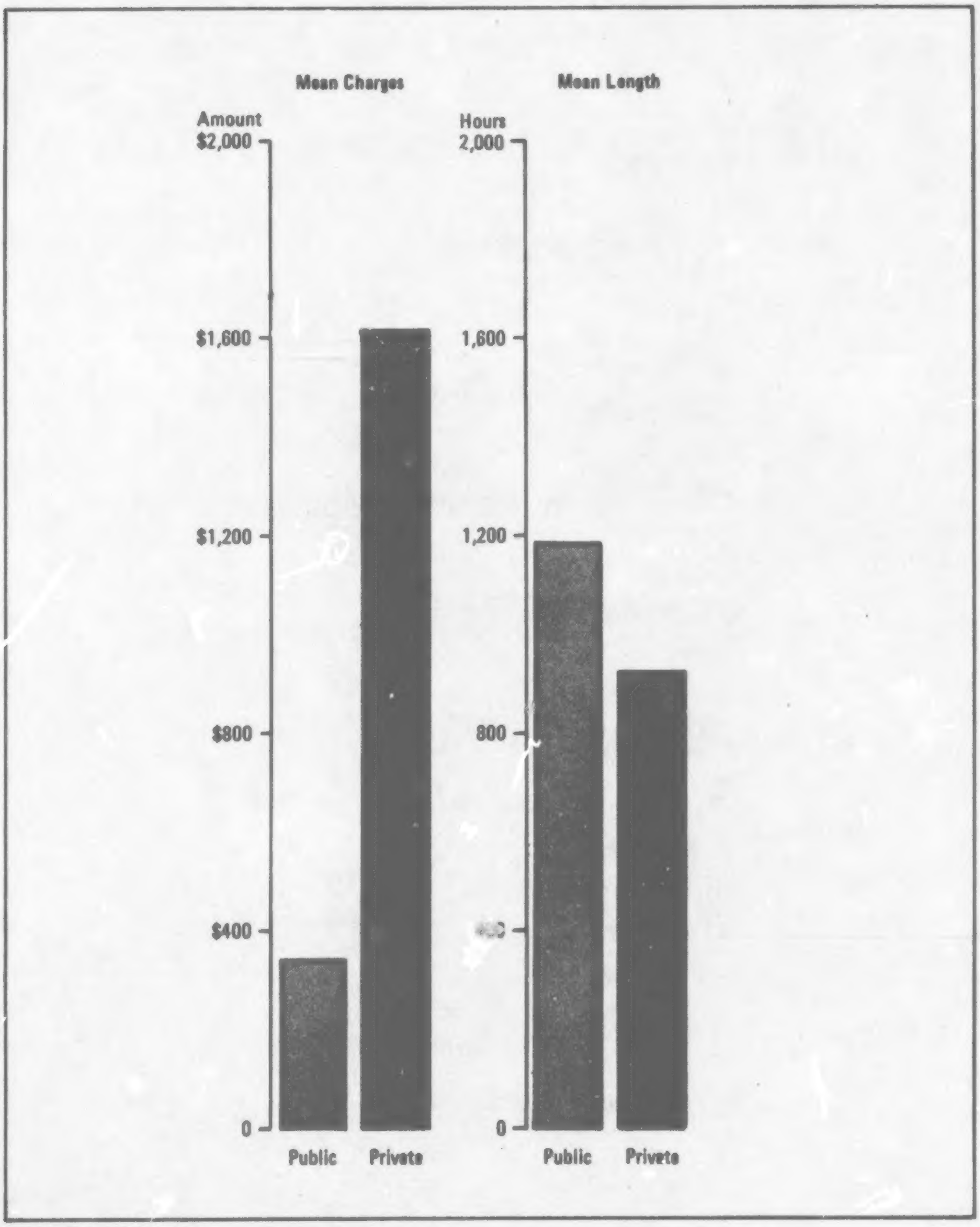
SOURCE: Table 9.1

Chart 9.2
Hours per Week of Class Time in Noncollegiate Postsecondary Schools, by Program Area



SOURCE: Table 9.2

Chart 9.3
Charges and Length of Occupational Programs in Noncollegiate Schools



SOURCE: Table 9.3

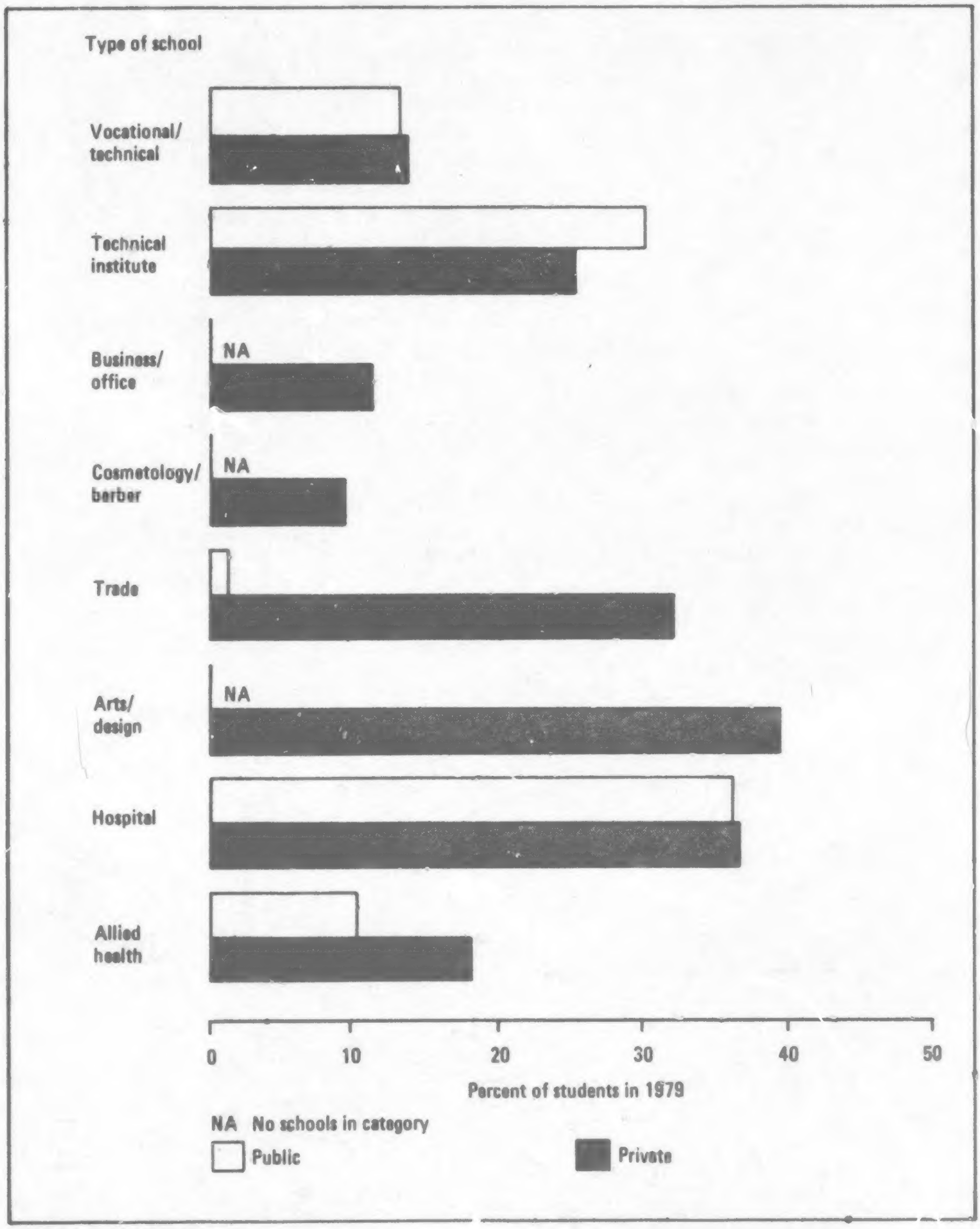
costs of tuition and fees for an academic year does indicate the range of collegiate costs, though. Two-year institutions averaged $354 per year for public institutions in 1978-79, $1,764 per year for private institutions. Four-year institutions had considerably higher average charges, $614 for public and $2,562 for private schools. Obviously, collegiate level instruction varies as widely in cost as do many noncollegiate programs. Private schools of all types have higher average charges than public schools.

Many circumstances may cause students to leave vocational programs prior to completion. When students in noncollegiate postsecondary schools were asked to identify potential problems, both economic and personal difficulties were cited. For students in public vocational/technical schools, economic problems were mentioned most frequently by students, while students in hospital schools cited personal problems (table 9.4). Among students in private schools, economic problems were cited more often than personal problems not only for students in vocational/technical schools but also for students in technical institutes and arts/design schools (table 9.5). Of the variety of personal problems confronted by students in technical institutes, arts/design, and hospital schools, difficulty of training was mentioned most frequently. Other problems were more specific to school type.

Local availability of vocational training is a problem for some students. The proportion of students in noncollegiate schools by type who had to move in order to enroll in their training program are related to the availability of certain types of schools. For example, only 9.5 percent of cosmetology/barber students had to move, whereas 39.6 percent of arts/design students needed to move (chart 9.4 and table 9.6). Hospital school students included relatively high proportions who needed to move in order to attend (36.8 percent), as did trade schools (32.4 percent).

In summary, when the various costs are considered, it appears that Health programs are most costly in terms of time, money, and relocation requirements. Office Occupation programs, in contrast, appear to be more accessible and available at lower costs than other programs.

Chart 9.4
Students Needing to Change Place of Residence to Enroll in Noncollegiate Postsecondary Schools



SOURCE: Table 9.6

Table 9.1
Hours of instruction per week in academic and vocational areas for high school seniors, by high school program, race, and sex: 1972

High school program, race and sex	Hours of instruction	
	Academic	Vocational
General		
White males	19.38	2.94
White females	18.61	4.22
Black males	18.19	2.81
Black females	17.68	3.67
Academic		
White males	20.08	1.26
White females	20.05	1.72
Black males	20.51	1.40
Black females	20.12	2.29
Vocational		
White males	17.01	5.68
White females	18.29	6.50
Black males	16.03	5.01
Black females	17.66	6.41

SOURCE: David E. Wiley, Northwestern University, *High School Learning, Vocational Tracking, and What Then?*, prepared for United States Department of Education, National Center for Education Statistics, February 1980.

Table 9.2
Student time required for occupational programs in noncollegiate postsecondary schools, by program area: 1979

Time demands	Total	Agriculture	Distribution	Health	Occupational home economics	Office occupations	Technical	Trade and industrial
	Area of current program							
	Percentage distribution							
Hours per week of class time								
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Less than 10 hours	6.46	2.62	14.17	4.53	7.90	7.41	14.53	4.38
10-19 hours	9.61	5.04	17.34	8.17	3.67	12.89	7.90	7.86
20-29 hours	25.51	11.03	39.27	21.94	5.16	37.66	33.66	16.07
30-39 hours	36.11	62.69	27.40	39.21	77.43	28.80	42.70	38.47
40 hours or more	22.31	18.63	1.82	26.15	5.85	13.21	1.21	33.22
Not reported	.01	0	0	0	0	.02	0	0
Hours per week of studying								
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Less than 5 hours	33.55	24.62	37.25	11.69	40.86	34.19	35.85	41.69
5-9 hours	38.53	34.89	31.08	37.33	44.03	40.34	41.32	37.60
10 hours or more	27.91	40.48	31.67	50.98	15.11	25.45	22.83	20.71
Not reported	.01	0	0	0	0	.02	0	0

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations.

Table 9.3
Mean charges, and mean length of programs in noncollegiate postsecondary schools with occupational programs, by program area: 1978

Program area	Mean charges		Mean length (Hours)	
	Public	Private	Public	Private
Total	$345	$1,616	1,182	922
Agriculture	326	2,514	1,115	888
Distribution	310	926	999	327
Health	454	1,664	1,214	1,977
Occupational home economics	344	1,149	803	481
Office occupations	270	1,821	903	956
Technical	586	2,317	1,844	249
Trade and industrial	315	1,155	1,214	1,026

SOURCE: United States Department of Education, National Center for Education Statistics, Enrollments and Programs in Noncollegiate Postsecondary Schools, 1978, 1979.

Table 9.4
Potential problems that may cause students to leave programs in noncollegiate public postsecondary schools before completion, by type of school: 1979

Potential problems	Total	Vocational/ technical	Technical institute	Hospital	Allied Health
			Percentage distribution		
Total	100.0	100.0	100.0	100.0	100.0
No problems	87.1	86.4	96.4	91.5	92.6
Problems[1]	12.8	13.5	3.6	8.5	7.4
Economic	8.2	8.9	-	3.1	-
Conflict with work	2.0	2.2	-	-	-
Cost of program	2.3	2.4	-	2.5	-
Must get a job	3.5	3.8	-	.6	-
Difficulty with financial aid	.4	.5	-	-	-
Personal	4.9	4.8	3.6	5.1	7.0
School too far away	.7	.7	-	-	-
Conflict with family	1.2	1.1	3.6	2.2	2.6
Training too difficult	1.1	1.1	-	1.0	2.2
Quality of training	.8	.8	-	.5	-
Other personal	1.1	1.1	-	1.4	2.2
Other problems	2.1	2.3	-	.3	.4

[1] Table does not show problems for students in Business/Office, Cosmetology/Barber, Trade, or Arts/Design schools because there are not public schools in these categories.

NOTE: Details may not add because more than one reason could be selected.

SOURCE: United States Department of Education, National Center for Education Statistics, Enrollments and Programs in Noncollegiate Postsecondary Schools, 1978, 1979.

Table 9.5
Potential problems that may cause students to leave programs in noncollegiate private postsecondary schools before completion, by type of school: 1979

Potential problems	Total	Vocational/ technical	Technical institute	Business/ office	Cosmetology/ barber	Trade	Arts/ Design	Hospital	Allied Health
					Percentage distribution				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No problems	87.9	78.4	81.0	87.9	92.0	88.3	72.5	90.2	90.5
Problems	12.1	21.6	19.0	12.1	8.0	11.7	27.5	9.7	9.5
Economic	6.8	14.5	12.5	6.8	3.4	5.9	21.5	4.1	4.1
Conflict with work	1.4	4.9	1.4	1.7	.5	1.2	5.0	.6	.8
Cost of program	3.0	6.9	7.0	2.2	1.8	2.7	12.3	2.2	2.2
Must get a job	1.8	2.7	1.9	2.5	1.0	1.6	3.1	.6	.7
Difficulty with financial aid	.4	0	2.2	.4	.1	.4	1.1	.1	.4
Personal	5.8	8.1	7.6	6.1	3.8	5.9	11.3	5.7	6.0
School too far away	.6	.3	.4	.6	.5	1.1	.9	.1	1.3
Conflict with family	1.0	0	.2	1.3	1.0	.6	1.8	.6	1.5
Training too difficult	1.9	1.7	3.6	2.2	.7	.9	3.0	3.5	1.0
Quality of training	1.2	2.8	2.9	.8	.4	2.4	3.8	1.0	.4
Other personal	1.1	3.3	.5	1.2	1.2	.9	1.8	.4	1.8
Other problems	2.1	2.9	3.4	1.5	2.0	3.1	4.7	1.7	.1

NOTE: Details may not add because more than one reason could be selected.

SOURCE: United States Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations.

Table 9.6
Students needing to move to enroll in noncollegiate postsecondary schools with occupational programs, by type and control of school: 1979

Control of school	Total	Vocational/ Technical	Technical Institute	Business/ Office	Cosmetology/ Barber	Trade	Arts/ Design	Hospital	Allied Health
	Percentage distribution								
PRIVATE									
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Necessary to move	19.04	13.97	25.64	11.73	9.46	32.41	39.63	36.79	18.15
Not necessary to move	79.87	85.11	73.84	87.54	89.04	66.06	59.82	61.61	81.04
Not reported	1.09	.91	.52	.73	1.50	1.53	.55	1.61	.81
PUBLIC									
Total	100.00	100.00	100.00	*	*	100.00	*	100.00	100.00
Necessary to move	14.61	13.55	31.14	*	*	1.56	*	36.50	10.07
Not necessary to move	84.04	85.10	68.86	[illegible]	*	98.44	*	61.81	81.81
Not reported	1.35	1.35	0	*	*	0	*	1.69	2.12

*No schools in category.

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations.

Chapter 10

Outcomes of Vocational Education

Vocational education programs are intended to provide students with skills that will enable them to enter a related job upon completion of training. Thus an important aspect of determining vocational education outcomes is ascertaining students' career paths following training. Data on the education and labor force participation of persons who have received training provide information useful in identifying and assessing the benefits of vocational education.

Obtaining a comprehensive picture of occupational experiences as they relate to vocational education is more complicated than it might appear initially. Yet such a picture is not only informative but necessary. To ensure that programs are meeting societal needs, and that students are achieving their own goals in pursuing vocational education, both institutional and student perspectives should be considered, whenever possible, in examining outcomes. Clearly the range of education and employment options complicates the study of employment experiences relative to training. To consider the effects of vocational education offerings on the labor force, and to fairly evaluate the direct effectiveness of vocational programs, the transition from education to work must be examined in three phases: vocational enrollments, completion status, and placement status (chart 10.1).

Students enroll in vocational education courses for many reasons. Students may wish to acquire particular skills and use them to enter a chosen field. Other students may enroll in a vocational program on a strictly exploratory basis, particularly in the lower secondary grades. It is inappropriate to measure the impact of vocational education on these students in the same way that one would for students who have specific vocational objectives. The portion of total enrollments which should be examined in relation to completion or employment outcomes is that portion comprised of enrollments which are occupationally specific. This restriction reduces the base to be considered in completion and follow-up analyses.

Once an appropriate base of students is defined, the completion status of enrolled students becomes of interest. At this stage, the institutional and the student perspectives may not coincide. Since programs are designed to impart job entry skills, it might seem that program completion would be an important measure of program success. However, the objectives of vocational students may not require completion of programs. For example, a student may have most of the basic skills required to hold a given occupation, but need to obtain some specialized knowledge or skills. Such a student is likely to discontinue training as soon as he/she has obtained the needed skills. If one defines success of a program to be the fulfillment of students' training objectives, then the student just described may be considered as much a success of the program as may the program completer. Nevertheless, program completion remains a useful concept because it does provide information for those concerned with the institutional responsibilities for program planning and direction.

An examination of the completion status of 11th and 12th grade vocational education students in institutional programs shows that 45.5 percent of the students completed the program in which they were enrolled (tables 10.1 and 10.2 and chart 10.2). Another substantial share, 46.3 percent, remained in the program (it should be recalled that many programs are of 2 year's duration). Only 3.2 percent left after completing less than half the program.

Problems with establishing the completion status of postsecondary students make presentation of a similar discussion of postsecondary students inappropriate. The large number of students who stretch a 1 or 2 year program over a 5 to 10 year time span — the so-called "intermittent learners" — has made it almost

Chart 10.1
Transition from Education to Work

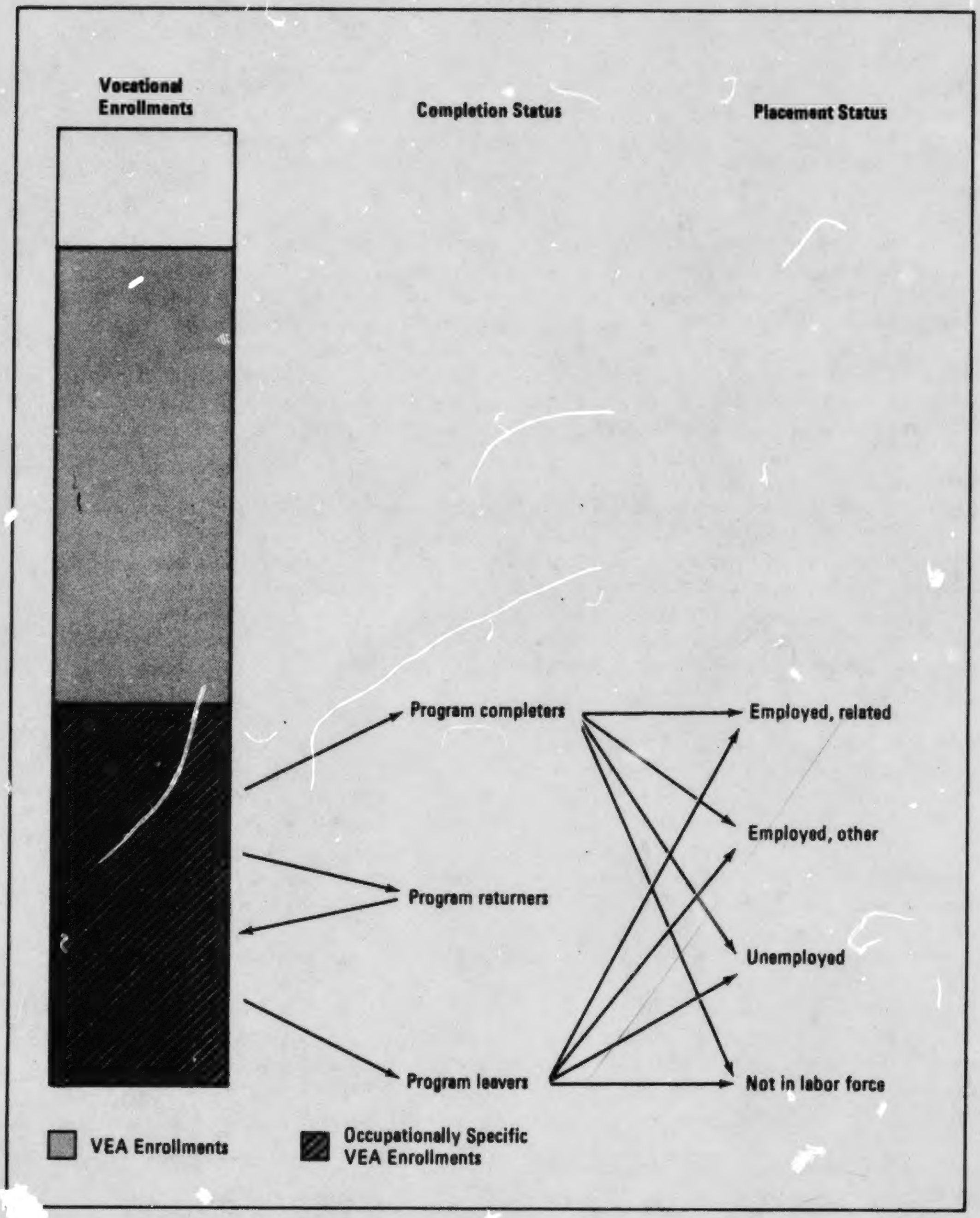

Vocational Enrollments
Completion Status
Placement Status
Program completers
Program returners
Program leavers
Employed, related
Employed, other
Unemployed
Not in labor force
VEA Enrollments
Occupationally Specific VEA Enrollments

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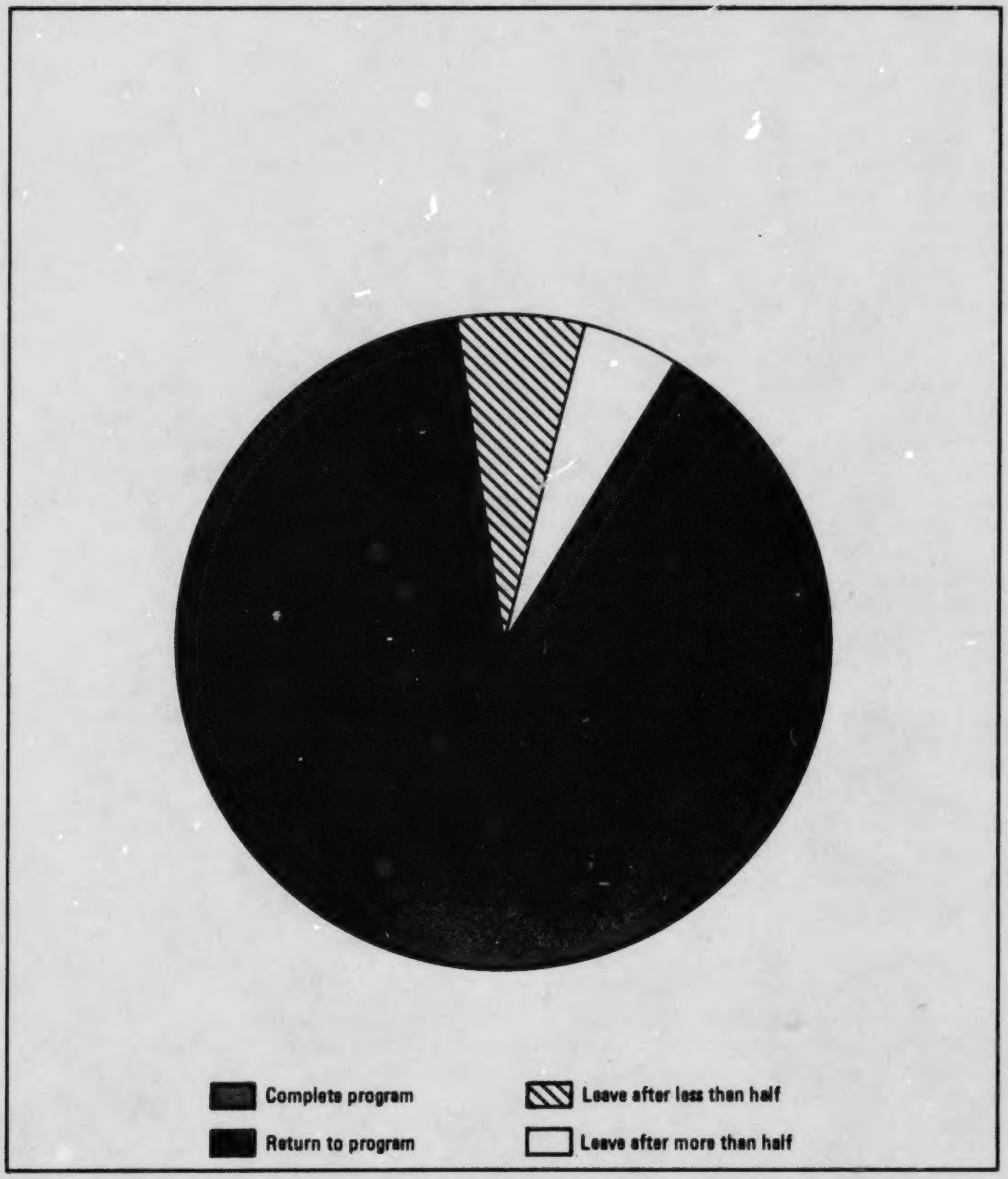
Chart 10.2
Completion Status of Eleventh and Twelfth Grade Vocational
Education Students: 1978-79



impossible for postsecondary institutions and adult providers to determine when a student has truly left a program. Data on completers and leavers that were reported through VEDS are shown by level by State in tables 10.3 and 10.4, and by program area by State in tables 10.5 and 10.6. Nonetheless, the measurement problems encountered in securing these data should be recalled.

Data on student completions of programs are insufficient for evaluating the effectiveness of vocational education from either the institutional or the student perspectives. A student may leave a program before formally completing it to take a job related to his/her training. This student could be considered a more favorable outcome than one who completes a program but cannot find a job. Hence the placement status of vocational students offers information essential to those examining the effectiveness of vocational education and those concerned with occupational supply. From the discussion of completion status, it should be recalled that both students who complete and students who leave programs are possible candidates for entry into occupational fields.

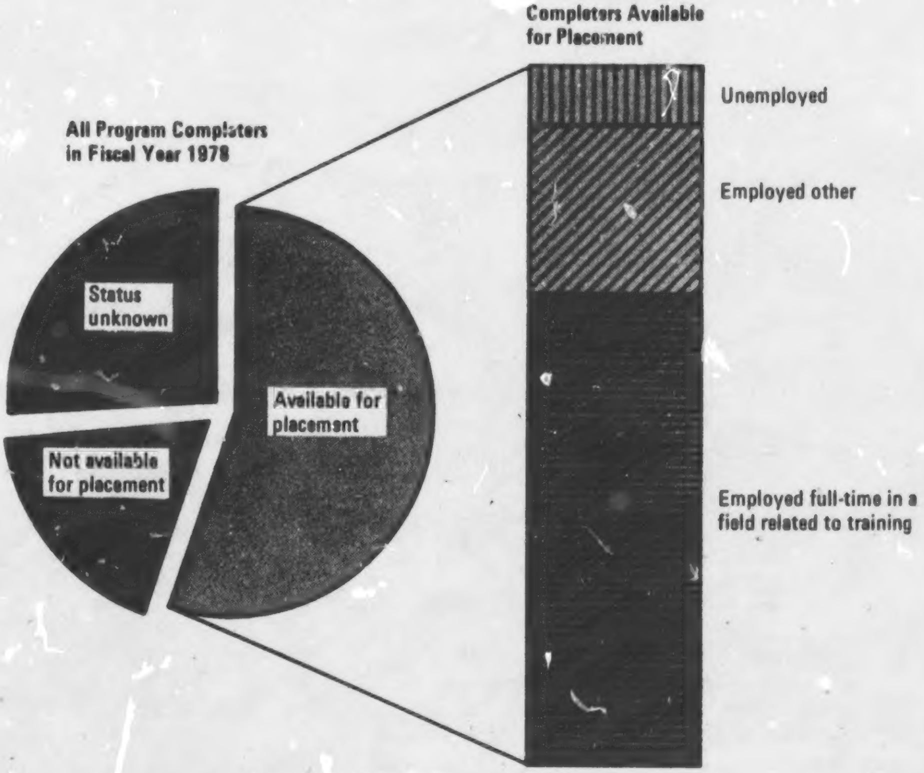
At present, the only available data on vocational education students relative to job placement consider persons who completed vocational program requirements (with or without graduating) or who terminated their training prior to normal completion time to take full-time employment in the field for which they were training. The status of program leavers (dropouts) is unknown. The data that are available on this limited group of program completers as a consequence are suggestive only of placement patterns, and not of placement status for all vocational education students. Of students completing vocational program requirements, slightly more than half are available for immediate placement in the labor force. The proportion has dropped slightly since fiscal year 1972, from 58.9 to 55.2 in fiscal year 1978 (table 10.7). Of those completers not available for placement, a group comprising almost one quarter of all completers chose to continue their education at a higher level. Among those completers available for placement up to 12 months after finishing vocational programs, 66.4 percent were employed in a field related to their training, 25.4 percent employed in another field, and 8.2 percent were unemployed but seeking work (chart 10.3).

Higher proportions of adult and postsecondary students completing programs are available for placement immediately upon completion of vocational programs than are available at the secondary level due, in large part, to the numbers of secondary students who continue their training after graduating from high school. About two-thirds of students in adult programs (66.7 percent) are available for placement, compared with 51.2 percent from secondary programs who are available (table 10.8). Placement status also appears to vary by program area (table 10.9), but not by handicapped or disadvantaged status (table 10.10). The two program areas of Health and Trade and Industrial have the highest proportions of completers immediately available for placement, although the percentages (61.5 for Health and 61.8 for Trade and Industrial) are not as high as those for completers of adult programs (chart 10.4). Because there is a substantial subgroup whose placement status is unknown (between 20 and 35 percent for all program areas, except Agriculture where it is 14.1 percent), it is inappropriate to draw more definitive conclusions from the available placement information.

The experience of students enrolled in noncollegiate postsecondary schools with occupational programs show that education and work are combined for many students. Almost half of the students in these schools are already working (table 10.11). The proportion of those working ranges from 32.8 to 68.8 percent depending on the program area, with the lowest proportion occuring in the Home Economics area and the highest being in the Technical area (chart 10.5). Of those not working, a larger share declare that they are currently looking for a job, again suggesting that much of postsecondary training is combined with work experience.

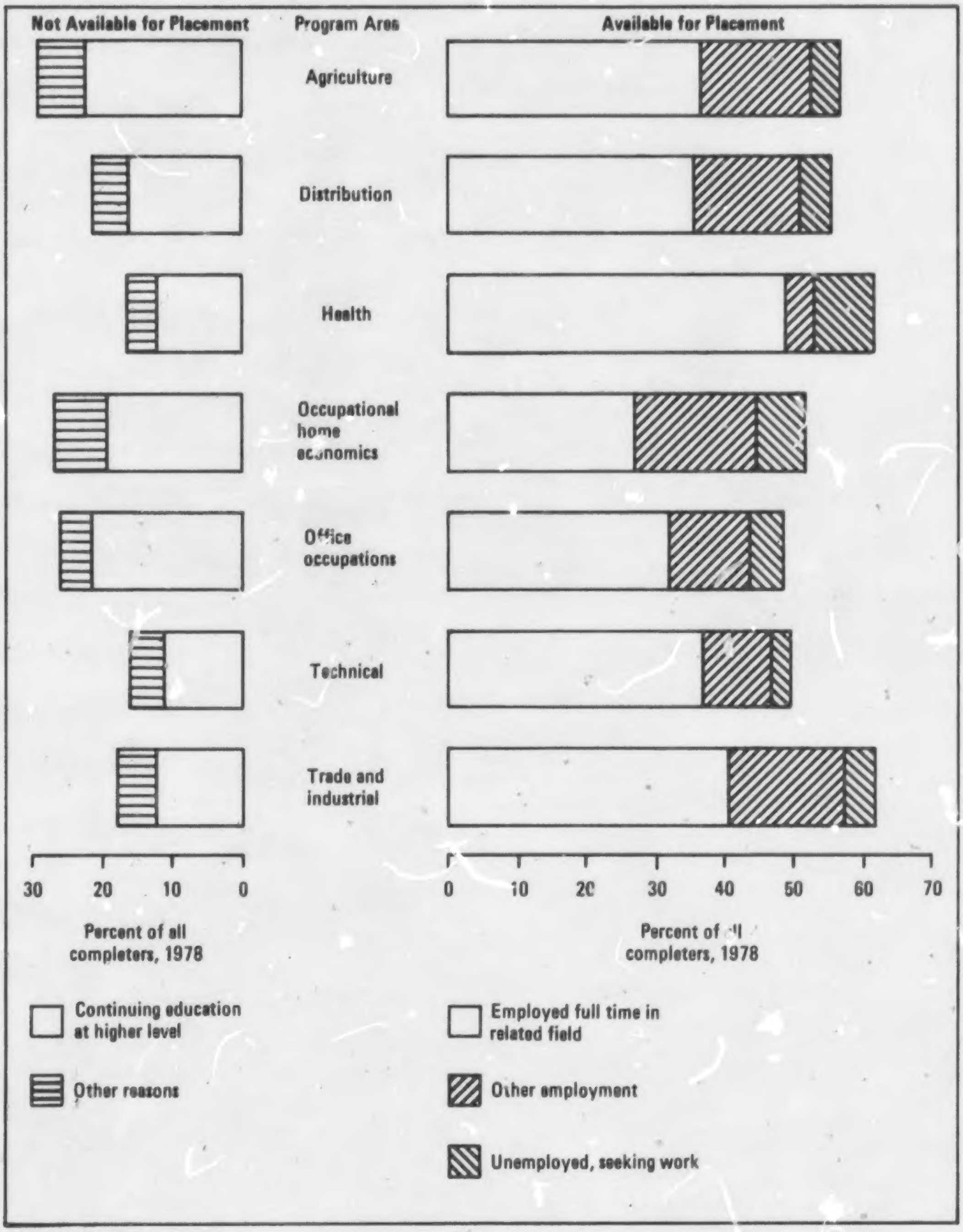
Stated work plans of students in noncollegiate schools indicate that almost 10 percent of these students plan to continue at their present jobs after completing vocational education programs (table 10.12). Students in different programs differ markedly in plans to continue working in the same field; this finding suggests that

Chart 10.3
Placement Status of Program Completers



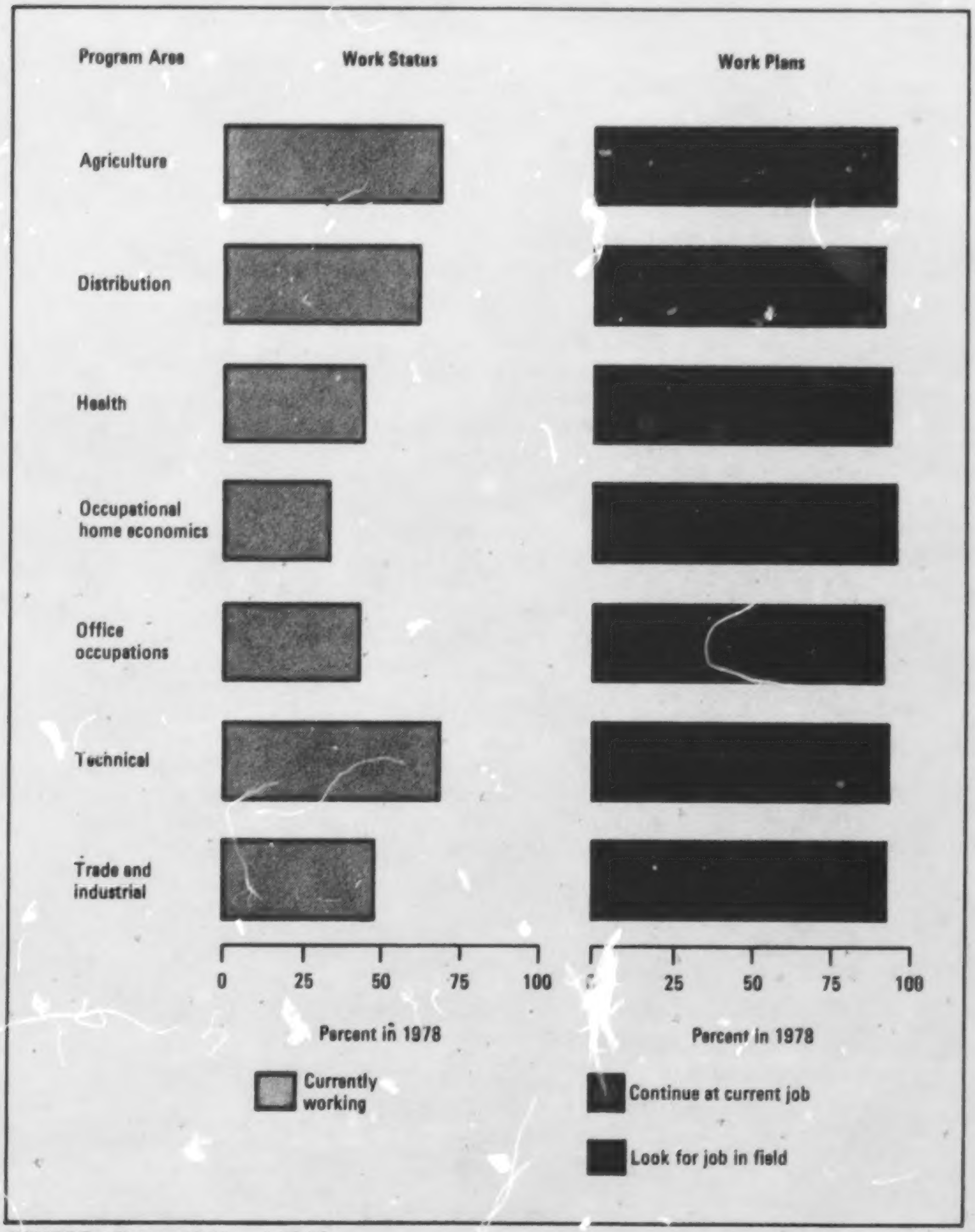
SOURCE: Table 10.7

Chart 10.4
Placement Status of Program Completers, by Program Area



SOURCE: Table 10.10

Chart 10.5
Work Status and Plans of Students in Noncollegiate Postsecondary Schools



SOURCE: Tables 10.11 and 10.12

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entry to some occupational areas may be contingent upon appropriate education. The overall average of 10 percent of students intending to continue their employment varies across program areas, with two areas showing considerable contrast. In Distribution, more than a fourth, 25.2 percent, plan to continue at a present job; in Health, fewer than five percent cite an intention to do so. However, more of the students in Health than in Distribution plan to go into the field in which they are training; the training in the Health area appears to supply the necessary credentials for entry level jobs.

Progress through Education and the Labor Force

Information on job placement relative to program enrollment or completions is either not available or is not complete for all vocational education students. Nevertheless the cumulative occupational and training experience of young people offer considerable insight into the contribution of vocational education to career opportunities. Longitudinal data are available documenting activities, including work and education, of young people more than 4 years after high school; these data permit comparisons of post high school activities for groups defined by racial/ethnic background and sex as well as high school program.

Not surprisingly, there are major differences between males and females in some post high school activities. Higher percentages of males than females reported that they were on active duty in the military (table 10.14). Substantial proportions of females reported that they were homemakers (chart 10.6). A higher proportion of females who had been in vocational programs in high school identified themselves as homemakers than did females from academic programs (52.0 percent compared with 30.0 percent). Females who were in academic programs were more likely to be continuing their education and hence were postponing homemaking or childbearing.

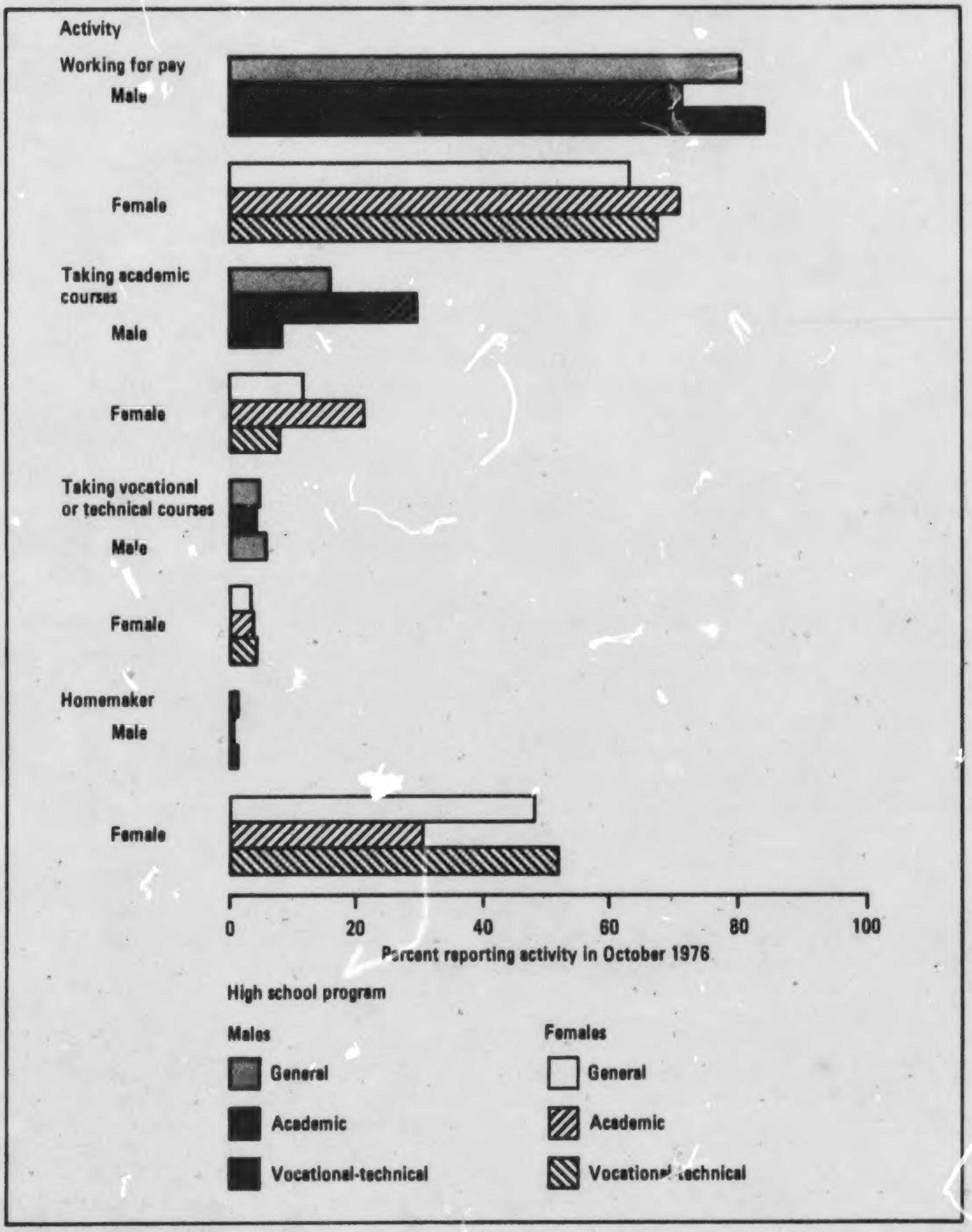
In general, persons from high school vocational programs got jobs for pay, while those in academic courses were more likely to continue their education. Three years after high school, 75.5 percent of those who were in vocational programs were working (table 10.13); 4½ years after high school the proportion was 74.5, reflecting the impact of females leaving the labor force, at least temporarily. If males only are considered, there were 83.6 and 84.3 percent of vocational program graduates working for pay 3 and 4½ years after high school, respectively. In contrast, only 71.6 percent of males from high school academic programs were working for pay after 4½ years.

Among those persons who were in academic programs, the proportion of those working for pay increased and those enrolled in academic courses or job training decreased between the 3rd and 4th years after high school. This decrease occurred as students completed (at least ended) training to begin careers. While close to two-thirds, 62.6 percent, of this group were enrolled in an academic or vocational program after 3 years, only 39.3 percent were still enrolled almost 4½ years later. The proportion of this subgroup working for pay increased at the same time from 62.1 to 71.3 percent.

Similar proportions of the groups defined on the basis of high school program pursued vocational training 4½ years after graduation. The 4.7 percent, of those who had been in vocational programs in high school and were enrolled in vocational programs 4½ years later, is close to the enrollment proportion of 3.9 percent of those who had been in academic programs and the 3.9 percent vocational enrollment of those who had been in general programs.

Summaries of the educational attainment of young adults reflect the differences in work experience already noted. In many cases, those who did not proceed into jobs were enrolled in school or training. More than half of the young people who had been in an academic program (54.4 percent) had earned a certificate, license, diploma, or degree of some kind after 4½ years (table 10.15). Of this group, a higher proportion of females than males had earned such awards. Smaller proportions, 32.0 percent of students who had been in general programs and 27.7 percent of students in vocational programs, had earned a certificate, degree, or other award.

Chart 10.6
Activities of Young Adults Four and One Half Years After High School, by High School Program



SOURCE: Table 10.14

The high proportion of vocational students who entered the labor force has already been noted. However, labor force participation did not preclude continuation of education. More than 20 percent of students in vocational programs reported later that they had received at least some vocational training after high school; another portion of that group (over 18 percent) reported college enrollment (table 10.16). However, more than half of the students in vocational programs reported no further educational attendance or program completion. When high school vocational students are considered by subgroups based on sex and racial/ethnic characteristics, the proportions vary only slightly. For all of the subgroups, more than half did not pursue additional education in the first 4½ years after completing high school. The slight differences in educational attainment between males and females, and between blacks and whites, were exceeded by greater differences from one high school program area to another (chart 10.7).

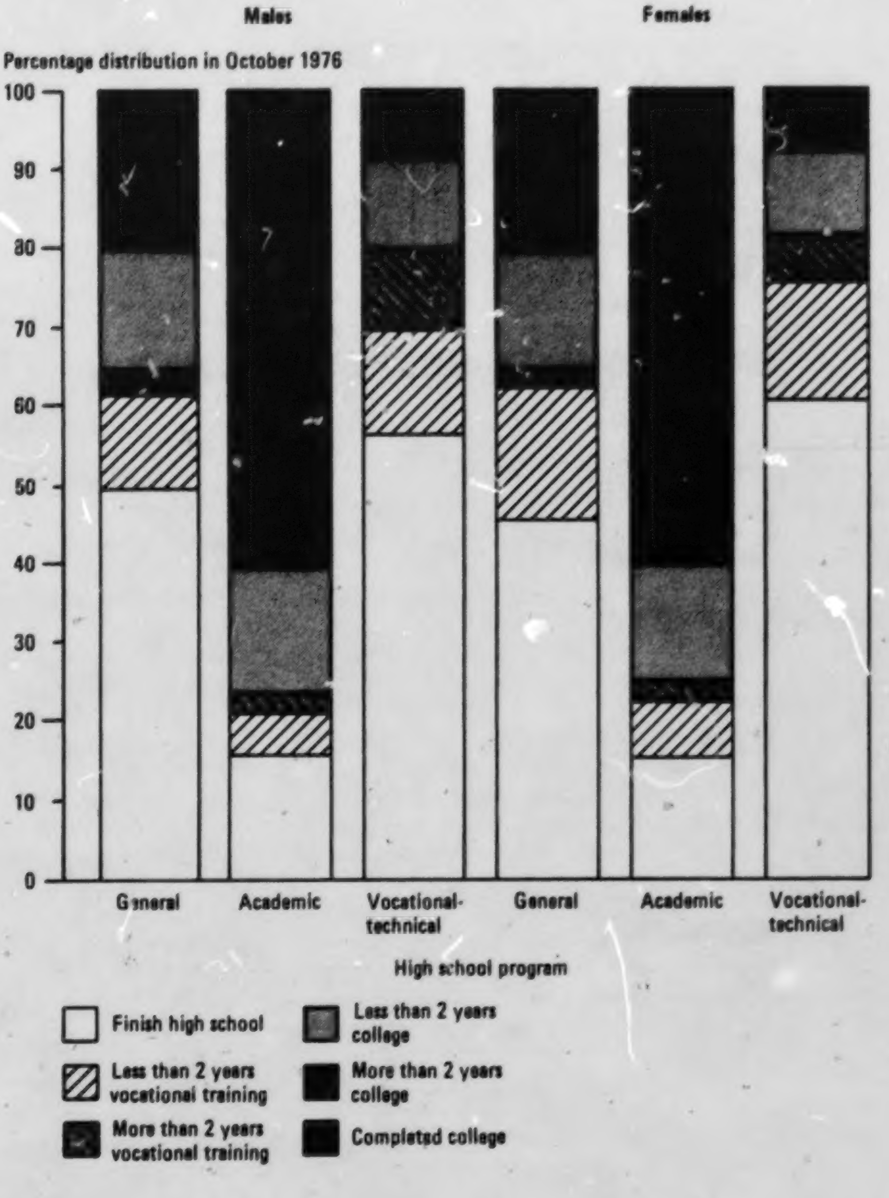
The job status of young adults reflects the differences in occupational and educational patterns that have already been observed (table 10.17). After 4 years, more graduates from high school vocational programs (68.4 percent) were working than were graduates of general or academic programs (63.9 and 54.4 percent, respectively). The nature of employment also differed between vocational and academic groups. Higher proportions of those from high school vocational programs were working full-time while proportions working part-time were higher among those from academic programs. More males than females from each high school program were working full-time; females had higher proportions working part-time or not working. Of those not working, slightly more females than males reported health problems or physical handicaps as their reason for not working. Among the high school program groups, more young people from vocational programs (7.4 percent) than from academic programs (3.4 percent) cited health or physical problems (table 10.18).

The occupational categories of employed young people reflect their training. The three categories of Clerical, Craftsman, and Operative account for a total of 63.3 percent of those from vocational programs who were working (table 10.19, chart 10.8). In comparison, only 38.6 percent of those from academic programs held jobs in those categories. Within occupational categories, maintenance of traditional single sex dominance is evident for persons from all program areas. Clerical occupations are dominated by females; of working vocational students, clerical occupations were reported by 59.4 percent of the females, only 7.8 percent of the males. Of working persons from academic programs, 37.7 percent of the females and 14.0 percent of the males were in clerical occupations. In contrast, male dominance is evident among those holding jobs as Craftsmen: of students from vocational programs, 31.1 percent of the males and only 1.6 percent of the females listed themselves as Craftsmen. Male dominance was just as striking for those from academic programs, with 14.5 percent of the males and 1.1 percent of the females holding jobs as Craftsmen. Sex biases were not as pronounced for person working in jobs classified as Professional. For those from a vocational program, 7.2 percent of working males and 7.0 percent of working females were holding professional jobs. For those from academic programs, 21.6 percent of working males and 32.0 percent of working females were in professional jobs.

White and black student groups showed few differences in types of jobs held. In contrast, groupings by high school program or sex appear to provide distinctive profiles (table 10.20). The continuing educational enrollment of large proportions of the academic program subgroup means that these data consider only a portion of the total high school class. Meaningful comparisons for this group would need to be based on later information, after more students have settled into jobs in a chosen field.

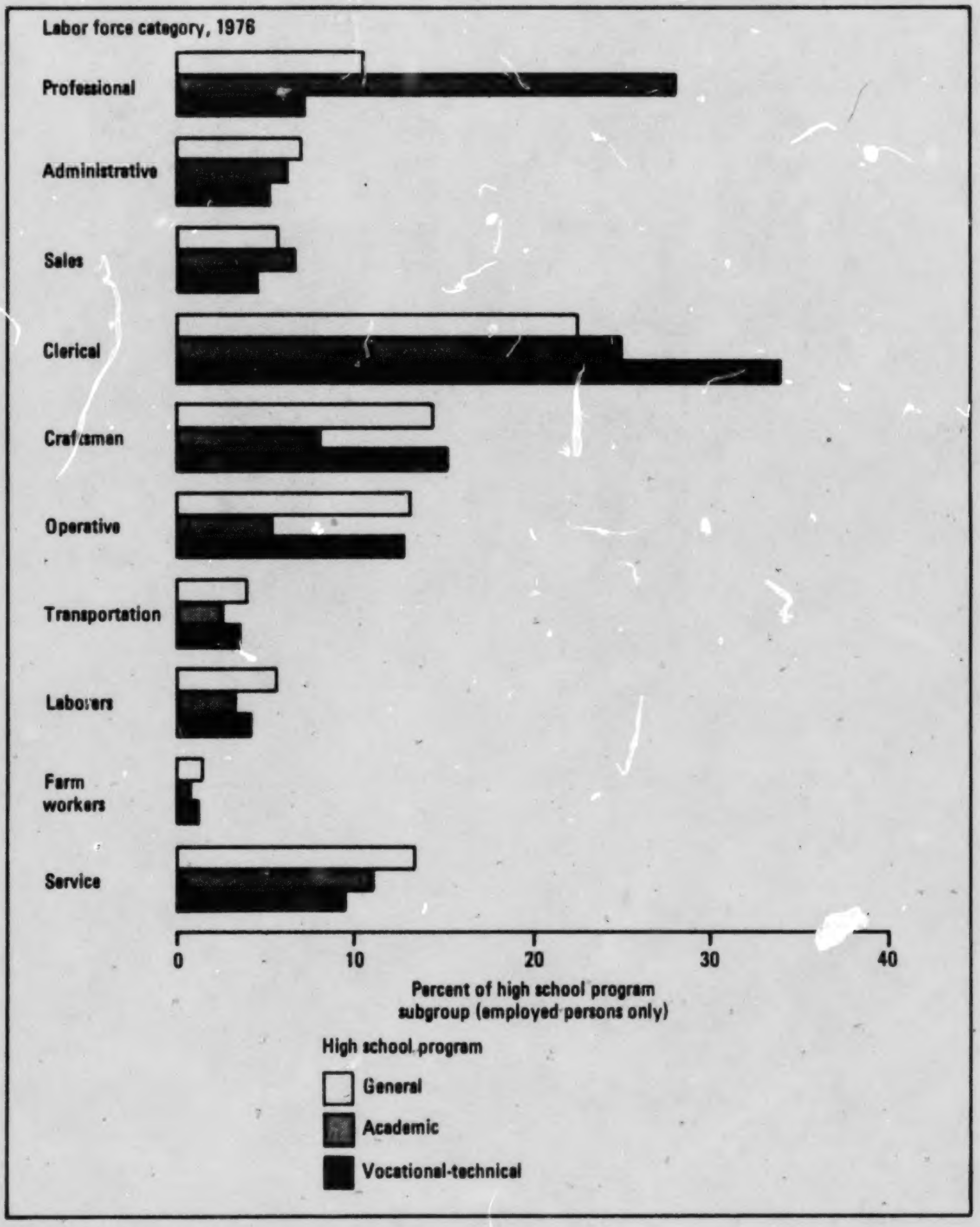
The availability of vocational education opportunities in particular program areas may explain postsecondary work and training patterns of students who are in vocational programs in high school. The future educational attainments of vocational students differ depending on the occupational program area in which they were working after high school. For most of the persons in vocational programs, high school education (which provided their vocational training) was sufficient for job entry. In fact, only among those later employed in health occupations did more than half receive any education beyond high school (table 10.21). Vocational training of less than 2 years duration was reported by 22.7 percent of this group choosing

Chart 10.7
Highest Level of Education Received by Young Adults, by High School Program



SOURCE: Table 10.16

Chart 10.8
Jobs Held by Young Adults Four and One Half Years After High School



SOURCE: Table 10.19

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Health fields; another 7.2 percent received more than 2 years of vocational training, while 10.3 percent were enrolled in college for less than 2 years and 10.4 percent were enrolled for more than 2 years or graduated.

The greater amount of training at the postsecondary level of those in health occupations appears to be a consequence of training opportunities. It may well be that general education, at least to the level of the high school graduate, is regarded as a necessary prerequisite for training in some program areas or programs. It has already been observed that training for some areas is focused at particular educational levels. Using the enrollment numbers presented earlier, it is possible to calculate the share of each program area enrollment that occurs at the secondary level. The percentages reported at the secondary level are, in order of magnitude: Home Economics (97.0 percent); Agriculture (91.5 percent); Trade and Industrial (78.0 percent); and Health (25.1 percent). In other words, training in health occupations is least likely to be available at the secondary level. Students interested in pursuing jobs in this area must seek additional vocational training after high school.

This information on availability of vocational instruction at the secondary level is closely related to the previous discussion of educational attainment. The educational attainments of those from vocational programs who are now employed may be examined in terms of students' earlier vocational program areas. The proportions of persons in each area who received no additional education, beginning with those who had the least additional training, are Home Economics (73.0 percent received no training past high school); Agriculture (71.9 percent); Trade and Industrial (70.4 percent); Office Occupations (62.4 percent); Distribution (55.8 percent); and Health (47.4 percent). This ranking of program areas precisely corresponds with the earlier ranking of availability of vocational instruction at the secondary level. Apparently, vocational students are seeking training in their chosen area and entering the labor market as soon as they have completed it. If that training is not available in high school, students seek it at the postsecondary level.

As these young adults looked retrospectively at their most recent education and training experience, high proportions of persons from all high school programs expressed satisfaction with their course curriculum. Much smaller proportions felt counseling or job placement services had been adequate. Over 60 percent of each high school program subgroup were satisfied with the course curriculum, compared with between 30 and 40 percent of persons in each subgroup who were satisfied with counseling or job placement (table 10.22). Differences across high school programs were minor. Females tended to express greater satisfaction than males, but there were few differences between blacks and whites.

In evaluating their current jobs, those from vocational programs were more likely to feel very satisfied or satisfied with their jobs as a whole than graduates of other programs. Vocational students also were more satisfied with their opportunities to use past training and education. Females were more pleased with their opportunities to use past training than were males; whites expressed greater satisfaction on this point than blacks (tables 10.23 and 10.24).

The Composition of the Labor Force

Persons entering the labor market may choose from an extensive array of occupational fields and positions. The nature and extent of training required for entry into these various positions is contingent upon occupational characteristics, regulation, demand, and tradition. As a result, the labor force is itself diverse, even within occupational groups. The educational attainment patterns for occupational groups within the labor force suggest both the range of possible options and current education and training standards. The median school years completed for most occupational groups is near 12 (table 10.25). Exceptions include Professional and Technical workers, and Managers and Administrators, which have higher median attainments of 16.5 and 13.4 years, respectively. Private Household Workers have lower attainment (10.8 years). However, most occupational groups are composed of persons with a variety of educational attainments, both above and below high school completion. Only in the case of Clerical workers do a majority of the labor force (56.1 percent) report that their highest educational attainment was high school completion.

Concentrations of employees with at least 4 years of college education occur in two areas: almost two-thirds (64.5 percent) of those in Professional occupations and nearly one-third (30.4 percent) in Managerial occupations.

The composition of the labor force by educational attainment is not static. While substantial time is required for changes in attainment levels in an entry level group to affect the composition of the entire labor force, such changes do occur. The educational composition of the entry level employees does, furthermore, affect job availability and possibly the competition a beginning employee may encounter. The occupational groups entered by college graduates during two successive periods provide a useful example of such change. From 1962 to 1969, more than 89 percent of college graduates entered the two occupational groups with the highest median school years completed: Professional and Technical, and Managers and Administrators (table 10.26). However, in the following 7-year period, from 1969 to 1976, only 64.5 percent of college graduates entered these occupational groups. More than 10 percent of college graduates entered clerical occupations. While the proportions of all graduates entering other occupational groups were smaller, they represented in several instances substantial percentage increases in the share of college graduates entering that field. For instance, whereas from 1962 to 1969 only 0.5 percent of college graduates entered Service occupations, from 1969 to 1976, 4.5 percent entered Service occupations, more than nine times as large a share of the total.

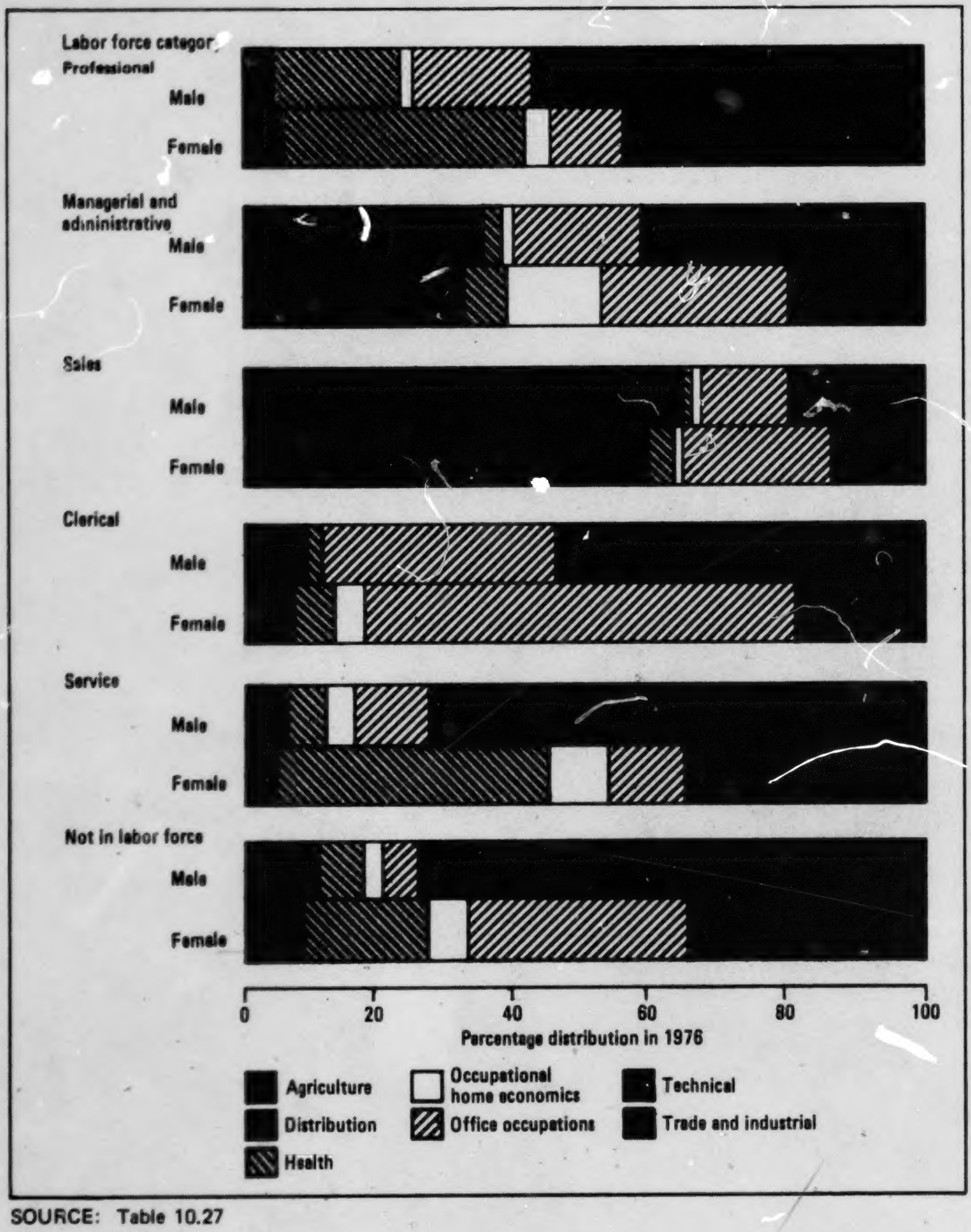
The significance of these shifts in occupational groups entered by persons in this one source of new entrants is that the direction of the shifts is away from entrance into professional jobs and into jobs not held in substantial proportion by college graduates. While existing economic conditions obviously affect the opportunities and hence the choice available to new workers at any given time, there may be increased average academic attainment among persons entering many occupations.

Many employees in each of the occupational groups have had vocational training. For most occupational groups, distribution of incumbents by field of training suggests that the relation of training to jobs is frequently complex. In only a few occupational groups do a majority of workers report that their training was in the same program area. One occupation where training was concentrated in a particular field is Sales workers: 61.8 percent of females in this occupation who reported vocational education training had studied in the area of Distribution (chart 10.9 and table 10.27). Those in Clerical Occupations received their training predominantly in the area of Office Occupations, although the proportions differed for males and females; 61.4 percent of females reporting training had received it in Office Occupations compared with only 31.8 percent of males. Most males in Craft, Transportation, and Operative occupations received their training in the Trade and Industrial area: 73.9, 67.1, and 63.0 percent, respectively. This information, incidentally, demonstrates some of the difficulties in following up vocational education students to ascertain whether they have entered the specific jobs for which they were trained.

The range of occupations available in the labor force is reflected in the occupational goals of high school seniors. Except for a few concentrated areas of interest, seniors displayed a diversity of goals when asked to state their occupational preferences, suggesting that they are aware of some of the variety that is possible. Students in academic programs were most interested in becoming professionals, with 65.8 percent citing examples of occupations in this category (table 10.28). In contrast, the occupational goal selected most frequently by vocational program students was clerical jobs, chosen by 35.6 percent of the group. Craftsman and Professional categories were next in order though even together (14.6 percent and 13.5 percent) they accounted for less of the total than the Clerical category.

Age and experience obviously have modifying effects on occupational goals. When the group of students who had been high school seniors was asked more than 4 years later what jobs they expected to fill at age 30 (as opposed to jobs they aspired to), the effects of more information about the labor force were apparent in their responses. Of young adults who had been in academic programs, 42.3 percent expected to be in

Chart 10.9
Field of Vocational School Training for Persons in Labor Force



SOURCE: Table 10.27

professional jobs when they were 30, compared with the 65.8 percent who had expressed hope for professional jobs earlier (table 10.29). Smaller proportions of vocational program students expected to be in clerical jobs than had earlier hoped for them (17.8 percent, down from 35.6 percent).

The changing of goals is characteristic of whites and blacks, males and females (table 10.30). Many factors are probably responsible: economic conditions, availability of information on job opportunities, and changes in personal preference. Changing job preference may well be a useful phenomenon, minimizing occupational isolation and stratification. Nevertheless, the constraints on opportunities that may be attributed to economic conditions or information available for career planning suggest that job information and vocational education planning are important in offering programs that both satisfy student preferences and meet manpower needs. The need to relate manpower information to vocational education data is apparent.

TABLE 19.1 -- PROGRAM COMPLETERS BY LEVEL, AND TRANSFERS, BY INSTRUCTIONAL PROGRAM: 1978-79

PROGRAM	COMPLETERS BY PROGRAM LEVEL TOTAL	GRADES 11&12	POST-SECONDARY	ADULT (LONG-TERM)	TRANSFERS
AGRICULTURAL PRODUCTION	56,648	52,409	1,797	2,442	4,130
AGRICULTURAL SUPPLIES/SERVICES	8,162	6,653	1,023	486	237
AGRICULTURAL MECHANICS	27,376	26,338	475	563	1,147
AGRICULTURAL PRODUCTS	2,204	1,762	182	260	79
HORTICULTURE	24,317	21,515	1,444	1,358	1,476
RENEWABLE NATURAL RESOURCES	5,086	4,330	611	145	411
FORESTRY	3,851	3,264	431	156	182
OTHER AGRICULTURE	6,877	6,646	134	97	82
ADVERTISING SERVICES	2,662	2,089	464	109	195
APPAREL & ACCESSORIES	9,001	8,092	773	136	355
AUTOMOTIVE	3,063	2,756	112	195	82
FINANCE & CREDIT	4,366	2,560	1,351	455	50
FLORISTRY	1,435	1,025	71	339	40
FOOD DISTRIBUTION	14,097	12,379	616	1,102	295
FOOD SERVICES	17,665	16,802	342	521	560
GENERAL MERCHANDISE	75,884	70,696	3,110	2,078	3,020
HARDWARE, BUILDING MATERIALS, ETC.	1,787	1,731	45	11	73
HOME FURNISHINGS	940	781	158	1	21
HOTEL & LODGING	2,270	1,212	726	332	172
INDUSTRIAL MARKETING	3,762	1,396	1,800	566	62
INSURANCE	2,959	1,832	158	969	23
PERSONAL SERVICES	2,348	2,263	80	5	120
REAL ESTATE	27,174	11,685	6,215	9,274	58
RECREATION & TOURISM	2,706	2,338	316	52	72
TRANSPORTATION	3,182	2,216	693	273	124
OTHER RETAIL TRADES	5,741	5,330	315	96	305
OTHER DISTRIBUTIVE EDUCATION	12,724	11,093	1,391	240	248
DENTAL ASSISTING	7,101	3,794	1,344	1,963	321
DENTAL HYGIENE(ASSOCIATE DEGREE)	2,130	102	2,011	17	130
DENTAL LABORATORY TECHNOLOGY	934	222	578	134	20
MEDICAL LABORATORY ASSISTING	2,623	863	1,511	249	148
OTHER MEDICAL LABORATORY TECHNOLOGY	1,078	100	907	71	145
NURSING(ASSOCIATE DEGREE)	22,109	2,940	18,375	794	1,517
PRACTICAL(VOCATIONAL)NURSING	29,625	3,911	7,255	18,459	1,161
NURSING ASSISTANCE(AIDE)	22,098	17,397	1,539	3,162	533
OTHER NURSING	3,866	2,072	735	1,059	115
REHABILITATION	1,271	265	925	81	17
RADIOLOGIC TECHNOLOGY(X-RAY)	2,715	518	1,980	217	173
MENTAL HEALTH TECHNOLOGY	2,245	539	1,611	95	140
INHALATION THERAPY	2,925	653	1,484	788	164
MEDICAL ASSISTANT	6,447	4,975	729	743	293
COMMUNITY HEALTH AIDE	3,595	3,271	69	255	86
MEDICAL EMERGENCY TECHNICIAN	7,262	3,589	950	2,723	1
OTHER HEALTH OCCUPATIONS EDUCATION	17,311	12,740	2,508	2,063	712
CARE & GUIDANCE OF CHILDREN	34,735	30,701	2,589	1,445	1,437
CLOTHING MGT., PRODUCTION, & SERVICES	12,698	11,432	369	897	551
FOOD MGT., PRODUCTION, & SERVICES	35,135	32,719	606	1,810	1,952
HOME FURN.,EQUIPMENT, & SERVICES	2,840	1,870	325	645	95
INSTITUTIONAL & HOME MGT. & SUP.	2,817	2,520	25	272	257
OTHER OCCUP. PREP. FOR HOMEMAKING	5,824	4,700	683	441	214
ACCOUNTING & COMPUTING OCCUPATIONS	103,240	88,870	11,356	3,014	2,971
COMPUTE & CONSOLE OPERATORS	10,326	8,166	1,507	653	270
PROGRAMMERS	12,427	7,559	4,158	710	856
OTHER BUSINESS DATA PROCESSING	20,112	16,515	2,019	1,578	667
FILING, OFFICE MACHINES, & GEN. OFF.	124,839	117,425	3,752	3,662	6,078
INFORMATION, COMMUNICATION OCCUP.	11,271	10,711	502	58	186
MATERIALS SUPPORT OCCUPATIONS	1,421	874	128	419	21
PERSONNEL, TRAINING, & RELATED	5,810	4,843	513	454	120
STENOGRAPHIC, SECRETARIAL, & RELATED	135,844	108,622	18,606	8,616	5,531
SUPERVISORY & ADMINISTRATIVE MGT.	17,925	8,009	8,201	1,635	408
TYPING & RELATED OCCUPATIONS	102,922	98,735	1,347	2,840	1,177
OTHER OFFICE OCCUPATIONS	12,397	10,985	932	480	158
ARCHITECTURAL TECHNOLOGY	4,113	1,127	2,657	329	180
AUTOMOTIVE TECHNOLOGY	1,194	233	873	88	240
CIVIL TECHNOLOGY	2,878	677	1,818	383	219
ELECTRICAL TECHNOLOGY	2,389	555	1,613	221	616
ELECTRONIC TECHNOLOGY	12,041	4,355	6,558	1,128	600
ENVIRONMENTAL-CONTROL TECHNOLOGY	927	161	685	81	93
INDUSTRIAL TECHNOLOGY	892	182	683	27	27
MECHANICAL TECHNOLOGY	2,978	466	2,105	407	458

TABLE 10.1 -- PROGRAM COMPLETERS BY LEVEL, AND TRANSFERS, BY INSTRUCTIONAL PROGRAM: 1978-79--CONTINUED

PROGRAM	COMPLETERS BY PROGRAM LEVEL TOTAL	GRADES 11&12	POST-SECONDARY	ADULT (LONG-TERM)	TRANSFERS
SCIENTIFIC DATA PROCESSING	2,491	1,519	788	184	46
COMMERCIAL PILOT TRAINING	1,277	1,026	230	21	1
FIRE & FIRE SAFETY TECHNOLOGY	2,233	996	1,155	82	0
POLICE SCIENCE TECHNOLOGY	9,620	5,210	4,340	70	223
OTHER TECHNICAL EDUCATION	9,458	2,080	6,164	1,214	527
WATER & WASTE WATER TECHNOLOGY	552	123	359	70	8
AIR CONDITIONING	11,699	6,390	2,030	3,279	630
APPLIANCE REPAIR	3,505	2,630	292	583	275
BODY & FENDER REPAIR	20,913	16,897	1,450	2,566	1,571
AUTO MECHANICS	77,836	66,410	4,470	6,956	4,223
AUTOMOTIVE SPECIALIZATION	9,176	8,685	365	126	77
AVIATION OCCUPATIONS	5,626	2,988	965	1,673	216
COMMERCIAL ART OCCUPATIONS	8,637	6,633	1,641	363	485
COMMERCIAL PHOTOGRAPHY OCCUP.	4,855	4,096	416	343	48
CARPENTRY	38,447	31,078	1,509	5,860	2,022
ELECTRICITY	10,584	7,415	439	2,730	806
MASONRY	8,748	7,072	251	1,425	607
PLUMBING & PIPEFITTING	5,519	2,327	349	2,843	64
OTHER CONSTRUCTION & MAINTENANCE	23,005	17,950	1,254	3,801	1,255
CUSTODIAL SERVICES	2,977	2,405	127	445	238
DIESEL MECHANIC	7,412	3,334	1,909	2,169	299
DRAFTING OCCUPATIONS	28,007	23,611	2,371	2,025	1,501
ELECTRICAL OCCUPATIONS	8,924	5,702	622	2,600	429
ELECTRONICS OCCUPATIONS	25,562	20,908	2,165	2,489	1,331
FOREMANSHIP, SUPER., & MGT. DEVEL.	3,133	1,560	946	627	11
GRAPHIC ARTS OCCUPATIONS	22,576	20,017	1,457	1,102	1,336
INSTRUMENT MAINTENANCE & REPAIR	876	426	189	261	48
MARITIME OCCUPATIONS	1,116	823	143	150	46
MACHINE SHOP	23,357	17,947	1,893	3,517	1,563
MACHINE TOOL OCCUPATION	1,873	1,189	224	460	68
SHEET METAL	3,332	2,200	116	1,016	108
WELDING & CUTTING	33,635	23,471	3,257	6,907	1,734
TOOL & DIE MAKING	1,006	365	287	354	9
OTHER METALWORKING OCCUPATIONS	10,071	9,087	296	688	139
METALLURGY OCCUPATIONS	233	191	20	22	7
COSMETOLOGY	26,986	21,942	1,686	3,358	1,925
OTHER PERSONAL SERVICES	874	623	128	123	16
PLASTICS OCCUPATIONS	1,180	1,108	31	41	4
FIREMAN TRAINING	6,005	4,748	694	563	72
LAW ENFORCEMENT TRAINING	12,496	6,356	4,098	2,042	236
OTHER PUBLIC SERVICE OCCUPATIONS	4,139	3,083	545	511	46
QUANTITY FOOD OCCUPATIONS	10,774	8,248	1,243	1,283	348
REFRIGERATION	1,188	791	169	228	35
SMALL ENGINE REPAIR	8,314	6,236	480	1,598	436
STATIONARY ENERGY SOURCES OCCUP.	554	405	20	129	33
TEXTILE PRODUCTION & FABRICATION	5,911	5,004	238	669	196
UPHOLSTERING	2,539	1,661	244	634	133
WOODWORKING OCCUPATIONS	10,575	9,445	236	894	149
OTHER TRADE & INDUSTRIAL OCCUPATIONS	30,164	25,145	1,674	3,345	839
OTHER PROGRAMS,GREATER THAN 1% OF TOTAL	51,071	44,195	3,793	3,083	8,306
OTHER PROGRAMS,LESS THAN 1% OF TOTAL	9,013	8,163	755	95	64
TOTAL	1,754,471	1,384,070	204,557	165,844	79,534

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 10.2 -- LEAVERS BY PROGRAM LEVEL AND PERCENT OF COMPLETION, BY INSTRUCTIONAL PROGRAM: 1978-79

PROGRAM	COMPLETED MORE THAN 50 PERCENT			COMPLETED 50 PERCENT OR LESS		
	GRADES 11 & 12	POST-SECONDARY	ADULT (LONG-TERM)	GRADES 11 & 12	POST-SECONDARY	ADULT (LONG-TERM)
AGRICULTURAL PRODUCTION	7,719	519	203	2,954	439	234
AGRICULTURAL SUPPLIES/SERVICES	663	506	43	360	90	27
AGRICULTURAL MECHANICS	2,747	93	67	1,414	72	61
AGRICULTURAL PRODUCTS	130	7	37	243	9	19
HORTICULTURE	3,410	282	143	2,437	250	362
RENEWABLE NATURAL RESOURCES	360	117	24	135	173	3
FORESTRY	341	114	35	239	106	31
OTHER AGRICULTURE	855	34	17	207	59	13
ADVERTISING SERVICES	88	21	2	118	46	36
APPAREL & ACCESSORIES	551	137	33	292	218	229
AUTOMOTIVE	193	41	34	213	16	45
FINANCE & CREDIT	129	228	24	133	1,231	156
FLORISTRY	154	0	23	32	0	13
FOOD DISTRIBUTION	1,340	36	56	566	11	78
FOOD SERVICES	921	130	35	985	71	118
GENERAL MERCHANDISE	8,149	1,226	316	4,285	935	615
HARDWARE, BUILDING MATERIALS, ETC.	108	0	0	80	0	7
HOME FURNISHINGS	83	67	4	42	75	23
HOTEL & LODGING	200	378	17	75	189	24
INDUSTRIAL MARKETING	48	29	12	72	40	100
INSURANCE	336	73	2	26	24	13
PERSONAL SERVICES	105	9	3	153	15	15
REAL ESTATE	363	669	168	21	402	233
RECREATION & TOURISM	190	60	4	101	33	19
TRANSPORTATION	351	160	13	82	137	5
OTHER RETAIL TRADES	502	97	6	526	75	116
OTHER DISTRIBUTIVE EDUCATION	783	358	25	1,507	361	28
DENTAL ASSISTING	444	99	143	148	147	290
DENTAL HYGIENE(ASSOCIATE DEGREE)	0	199	3	1	78	0
DENTAL LABORATORY TECHNOLOGY	11	33	6	13	32	79
MEDICAL LABORATORY ASSISTING	127	328	14	64	594	38
OTHER MEDICAL LABORATORY TECHNOLOGY	16	148	8	6	315	18
NURSING(ASSOCIATE DEGREE)	53	2,937	135	17	2,279	28
PRACTICAL(VOCATIONAL)NURSING	183	429	1,606	151	1,462	3,277
NURSING ASSISTANCE(AIDE)	2,491	6	604	1,078	29	586
OTHER NURSING	177	133	191	30	30	104
REHABILITATION	59	58	0	9	83	13
RADIOLOGIC TECHNOLOGY(X-RAY)	1	336	2	1	312	29
MENTAL HEALTH TECHNOLOGY	20	413	6	3	422	1
INHALATION THERAPY	53	244	50	3	273	101
MEDICAL ASSISTANT	347	109	62	195	234	209
COMMUNITY HEALTH AIDE	175	16	3	190	36	20
MEDICAL EMERGENCY TECHNICIAN	159	307	229	4	345	128
OTHER HEALTH OCCUPATIONS EDUCATION	1,875	530	273	1,205	309	207
CARE & GUIDANCE OF CHILDREN	2,855	1,088	258	2,340	1,044	2,039
CLOTHING MGT., PRODUCTION, & SERVICES	996	12	90	617	32	97
FOOD MGT., PRODUCTION, & SERVICES	3,029	345	293	2,912	392	396
HOME FURN.,EQUIPMENT, & SERVICES	185	53	48	86	26	44
INSTITUTIONAL & HOME MGT. & SUP.	231	49	24	265	45	14
OTHER OCCUP. PREP. FOR HOMEMAKING	357	62	33	373	277	73
ACCOUNTING & COMPUTING OCCUPATIONS	8,249	3,495	689	4,212	4,843	2,203
COMPUTE & CONSOLE OPERATORS	329	404	160	344	607	105
PROGRAMMERS	845	1,093	69	785	2,059	319
OTHER BUSINESS DATA PROCESSING	1,892	887	316	512	562	788
FILING, OFFICE MACHINES, & GEN. OFF.	10,053	1,601	934	9,816	2,190	2,367
INFORMATION, COMMUNICATION OCCUP.	509	65	5	857	67	25
MATERIALS SUPPORT OCCUPATIONS	99	3	1	217	9	30
PERSONNEL, TRAINING, & RELATED	656	455	18	54	571	15
STENOGRAPHIC, SECRETARIAL, & RELATED	17,303	3,331	2,147	7,569	5,826	4,042
SUPERVISORY & ADMINISTRATIVE MGT.	186	2,096	155	102	2,446	359
TYPING & RELATED OCCUPATIONS	9,625	195	441	2,963	510	1,767
OTHER OFFICE OCCUPATIONS	1,495	188	63	404	459	232
ARCHITECTURAL TECHNOLOGY	42	429	27	16	844	208
AUTOMOTIVE TECHNOLOGY	13	561	47	10	654	46
CIVIL TECHNOLOGY	25	608	54	80	535	206
ELECTRICAL TECHNOLOGY	32	299	33	174	768	89
ELECTRONIC TECHNOLOGY	264	1,682	261	189	3,047	1,103
ENVIRONMENTAL-CONTROL TECHNOLOGY	9	509	23	5	747	55
INDUSTRIAL TECHNOLOGY	1	182	11	0	391	48
MECHANICAL TECHNOLOGY	37	565	39	22	1,276	282

TABLE 10.2 -- LEAVERS BY PROGRAM LEVEL AND PERCENT OF COMPLETION, BY INSTRUCTIONAL PROGRAM: 1978-79--CONTINUED

PROGRAM	COMPLETED MORE THAN 50 PERCENT			COMPLETED 50 PERCENT OR LESS		
	GRADES 11 & 12	POST-SECONDARY	ADULT (LONG-TERM)	GRADES 11 & 12	POST-SECONDARY	ADULT (LONG-TERM)
SCIENTIFIC DATA PROCESSING	153	26	0	72	52	109
COMMERCIAL PILOT TRAINING	0	28	10	0	21	41
FIRE & FIRE SAFETY TECHNOLOGY	110	291	28	0	291	229
POLICE SCIENCE TECHNOLOGY	138	1,011	57	4	1,364	95
OTHER TECHNICAL EDUCATION	90	818	136	26	1,061	222
WATER & WASTE WATER TECHNOLOGY	82	137	19	0	224	133
AIR CONDITIONING	770	213	533	842	835	1,442
APPLIANCE REPAIR	485	25	84	357	75	337
BODY & FENDER REPAIR	2,898	312	508	2,064	567	1,428
AUTO MECHANICS	7,571	960	1,603	6,603	1,862	4,852
AUTOMOTIVE SPECIALIZATION	2,474	95	93	539	53	79
AVIATION OCCUPATIONS	311	126	261	158	220	1,199
COMMERCIAL ART OCCUPATIONS	730	410	97	460	724	299
COMMERCIAL PHOTOGRAPHY OCCUP.	523	106	69	117	228	48
CARPENTRY	3,105	423	762	3,064	551	1,714
ELECTRICITY	553	121	386	919	229	714
MASONRY	857	68	283	919	279	718
PLUMBING & PIPEFITTING	192	31	271	355	45	545
OTHER CONSTRUCTION & MAINTENANCE	2,525	150	392	2,497	253	951
CUSTODIAL SERVICES	307	20	85	282	0	980
DIESEL MECHANIC	386	457	329	407	672	843
DRAFTING OCCUPATIONS	2,186	725	593	1,901	1,032	1,689
ELECTRICAL OCCUPATIONS	669	85	481	790	220	1,405
ELECTRONICS OCCUPATIONS	2,507	479	446	1,469	1,218	1,669
FOREMANSHIP, SUPER., & MGT. DEVEL.	16	143	82	8	326	22
GRAPHIC ARTS OCCUPATIONS	2,565	206	282	1,610	381	562
INSTRUMENT MAINTENANCE & REPAIR	58	7	28	47	6	75
MARITIME OCCUPATIONS	29	7	53	30	0	133
MACHINE SHOP	1,863	400	768	1,613	970	2,227
MACHINE TOOL OCCUPATION	199	9	73	241	17	209
SHEET METAL	218	16	121	223	70	180
WELDING & CUTTING	3,066	834	1,692	4,698	1,236	4,494
TOOL & DIE MAKING	37	7	144	51	0	161
OTHER METALWORKING OCCUPATIONS	1,026	9	41	618	9	124
METALLURGY OCCUPATIONS	34	4	1	1	6	0
COSMETOLOGY	3,484	255	619	1,657	878	1,549
OTHER PERSONAL SERVICES	118	18	21	27	26	34
PLASTICS OCCUPATIONS	235	1	16	51	2	71
FIREMAN TRAINING	496	327	19	26	65	74
LAW ENFORCEMENT TRAINING	522	1,557	21	150	673	60
OTHER PUBLIC SERVICE OCCUPATIONS	541	420	37	94	212	20
QUANTITY FOOD OCCUPATIONS	1,776	225	278	1,026	101	629
REFRIGERATION	75	34	26	80	41	25
SMALL ENGINE REPAIR	1,195	83	254	708	83	486
STATIONARY ENERGY SOURCES OCCUP.	35	0	0	116	0	42
TEXTILE PRODUCTION & FABRICATION	473	118	75	502	60	288
UPHOLSTERING	289	49	140	182	41	449
WOODWORKING OCCUPATIONS	1,017	168	84	648	161	127
OTHER TRADE & INDUSTRIAL OCCUPATIONS	2,866	259	1,050	1,750	292	1,612
OTHER PROGRAMS,GREATER THAN 1% OF TOTAL	3,669	891	674	4,636	2,153	598
OTHER PROGRAMS,LESS THAN 1% OF TOTAL	542	164	2	32	1,218	301
TOTAL	150,455	45,403	25,075	98,026	63,575	60,360

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 10.3 -- PROGRAM COMPLETERS BY LEVEL, AND TRANSFERS, BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	COMPLETERS BY PROGRAM LEVEL TOTAL	 GRADES 11&12	 POST-SECONDARY	 ADULT (LONG-TERM)	TRANSFERS
ALABAMA	36,203	23,444	5,880	6,679	2,367
ALASKA	11,307	3,477	6,452	1,378	0
ARIZONA	0	0	0	0	0
ARKANSAS	14,253	11,017	195	3,041	785
CALIFORNIA	379,673	379,673	0	0	0
COLORADO	21,751	16,261	1,721	3,769	1,559
CONNECTICUT	22,311	19,138	1,521	1,652	0
DELAWARE	6,578	2,989	2,454	1,135	0
DISTRICT OF COLUMBIA	4,328	3,917	237	174	433
FLORIDA	51,099	33,888	6,859	10,352	0
GEORGIA	8,098	0	7,774	324	846
HAWAII	9,515	7,217	1,413	885	540
IDAHO	4,389	2,406	1,838	145	0
ILLINOIS	114,[illegible]	95,707	12,461	6,142	1,954
INDIANA	10,244	9,525	0	719	0
IOWA	17,757	9,931	3,292	4,534	466
KANSAS	20,666	9,565	5,316	5,785	0
KENTUCKY	19,292	16,453	434	2,405	1,661
LOUISIANA	42,751	38,871	0	3,880	0
MAINE	5,502	4,280	318	904	179
MARYLAND	38,354	25,712	12,642	0	457
MASSACHUSETTS	47,629	36,110	5,939	5,580	0
MICHIGAN	82,794	75,550	6,373	871	5,174
MINNESOTA	61,459	42,054	19,405	0	0
MISSISSIPPI	18,867	12,579	1,560	4,728	514
MISSOURI	51,299	37,472	4,319	9,508	0
NEBRASKA	12,693	9,369	2,140	1,184	0
NEVADA	2,441	2,251	179	11	38
NEW HAMPSHIRE	4,516	3,495	915	106	148
NEW JERSEY	29,602	19,820	5,806	3,976	1,729
NEW MEXICO	8,019	5,868	72	2,079	360
NEW YORK	0	0	0	0	0
NORTH CAROLINA	39,241	39,241	0	0	377
NORTH DAKOTA	6,839	4,598	1,141	1,100	0
OHIO	121,998	99,428	7,180	15,390	40,228
OKLAHOMA	17,983	12,664	2,743	2,576	4,091
OREGON	16,356	12,799	3,120	437	0
PENNSYLVANIA	74,675	63,177	6,466	5,032	4,929
RHODE ISLAND	6,765	4,999	1,766	0	0
SOUTH CAROLINA	22,939	17,094	3,332	2,513	2,279
SOUTH DAKOTA	6,159	4,770	0	1,389	180
TENNESSEE	26,894	18,428	2,409	6,057	834
TEXAS	113,956	47,911	35,861	30,184	0
UTAH	17,218	12,611	4,600	7	0
VERMONT	3,373	3,205	0	168	304
VIRGINIA	34,498	27,072	4,452	2,974	1,690
WASHINGTON	37,843	24,800	7,839	5,204	0
WEST VIRGINIA	14,088	10,694	1,642	1,752	5,222
WISCONSIN	19,727	11,743	3,761	4,223	[illegible]
WYOMING	1,722	1,527	159	36	0
TOTAL U.S.	1,740,054	1,374,800	203,986	161,268	79,465
AMERICAN SAMOA	387	358	29	0	0
NORTHERN MARIANAS	79	79	0	0	16
GUAM	255	195	0	60	49
PUERTO RICO	12,997	8,013	468	4,516	0
TRUST TERRITORY	699	625	74	0	4
OUTLYING AREAS	14,417	9,270	571	4,576	69
U.S. & OUTLYING AREA	1,754,471	1,384,070	204,557	165,844	79,534

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 10.4 -- LEAVERS BY PROGRAM LEVEL AND PERCENT OF COMPLETION, BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	COMPLETED MORE THAN 50 PERCENT			COMPLETED 50 PERCENT OR LESS		
	GRADES 11 & 12	POST-SECONDARY	ADULT (LONG-TERM)	GRADES 11 & 12	POST-SECONDARY	ADULT (LONG-TERM)
ALABAMA	3,682	4,277	9,656	5,592	4,810	9,015
ALASKA	0	0	0	0	0	0
ARIZONA	0	0	0	0	0	0
ARKANSAS	1,041	14	907	1,761	67	1,846
CALIFORNIA	68,130	0	0	0	0	0
COLORADO	984	2,467	3,011	2,507	2,076	4,781
CONNECTICUT	794	602	[illegible]	1,274	3	528
DELAWARE	191	0	0	73	0	0
DISTRICT OF COLUMBIA	0	0	0	0	0	0
FLORIDA	2,164	0	749	0	0	0
GEORGIA	0	1,808	117	0	14,822	1,309
HAWAII	0	3,238	968	0	0	0
IDAHO	844	463	12	1,222	602	0
ILLINOIS	9,733	5,577	1,795	3,651	3,438	1,424
INDIANA	938	0	69	917	0	163
IOWA	745	794	1,163	412	1,850	2,155
KANSAS	8,415	3,407	3,945	2,923	621	4,051
KENTUCKY	3,677	36	926	7,185	142	3,134
LOUISIANA	0	0	0	0	0	0
MAINE	474	172	485	579	51	247
MARYLAND	183	0	0	499	0	0
MASSACHUSETTS	544	377	1,036	0	0	0
MICHIGAN	5,613	2,781	264	8,444	6,971	641
MINNESOTA	0	0	0	0	0	0
MISSISSIPPI	1,487	446	414	2,028	1,110	1,648
MISSOURI	0	0	0	0	0	0
NEBRASKA	899	734	83	1,031	1,083	158
NEVADA	368	53	0	441	112	0
NEW HAMPSHIRE	367	68	23	757	338	39
NEW JERSEY	2,056	0	395	1,669	0	1,483
NEW MEXICO	696	0	138	1,575	158	2,951
NEW YORK	0	0	0	0	0	0
NORTH CAROLINA	925	0	0	1,284	0	0
NORTH DAKOTA	704	383	269	0	0	0
OHIO	4,317	801	1,452	6,899	2,764	[illegible]
OKLAHOMA	2,010	5,344	357	1,972	8,846	885
OREGON	2,417	0	0	15,986	0	0
PENNSYLVANIA	3,487	3,165	563	3,441	1,359	2,093
RHODE ISLAND	282	48	0	21	0	0
SOUTH CAROLINA	2,473	0	17	5,595	0	56
SOUTH DAKOTA	123	0	89	[illegible]	0	302
TENNESSEE	3,078	[illegible]	488	[illegible]	5,025	[illegible]
TEXAS	4,144	0	0	2,055	0	0
UTAH	1,751	852	2	2,166	2,590	1
VERMONT	477	[illegible]	[illegible]	514	[illegible]	27
VIRGINIA	2,663	0	85	2,814	11	333
WASHINGTON	2,935	2,829	0	0	0	12,312
WEST VIRGINIA	[illegible]	2,199	331	2,867	[illegible]	562
WISCONSIN	509	0	0	433	0	0
WYOMING	769	131	34	686	73	75
TOTAL U.S.	150,005	45,363	24,823	97,970	63,328	60,129
AMERICAN SAMOA	0	0	0	0	0	0
NORTHERN MARIANAS	0	0	0	36	0	0
GUAM	28	0	1	16	110	178
PUERTO RICO	367	23	251	4	136	53
TRUST TERRITORY	55	17	0	0	1	0
OUTLYING AREAS	450	40	252	56	247	231
U.S. AND OUTLYING AREAS	150,455	45,403	25,075	98,026	63,575	60,360

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 10.5 -- PROGRAM COMPLETERS BY INSTRUCTIONAL PROGRAM AND BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	TOTAL	AGRI-CULTURE	DISTRI-BUTION	HEALTH	OCCUP. HOME ECON	OFFICE OCCUP.	TECH-NICAL	TRADE & INDUS	OTHER NEC
ALABAMA	36,203	3,685	3,588	3,485	1,442	9,184	653	12,733	1,433
ALASKA	11,307	144	934	769	285	4,026	940	2,935	1,274
ARIZONA	0	0	0	0	0	0	0	0	0
ARKANSAS	14,253	3,119	1,656	1,253	448	3,[illegible]38	7	3,032	0
CALIFORNIA	379,673	21,055	36,596	24,457	20,131	156,137	14,118	104,665	2,514
COLORADO	21,751	686	173	1,993	1,206	8,321	992	4,659	3,521
CONNECTICUT	22,311	319	1,140	1,695	526	11,327	101	7,203	0
DELAWARE	6,578	401	369	563	2[illegible]	2,012	648	1,579	0
DISTRICT OF COLUMBIA	4,328	38	302	64	2,[illegible]35	795	0	794	0
FLORIDA	51,099	2,151	5,106	5,944	[illegible],657	14,325	1,357	11,522	8,037
GEORGIA	8,098	46	115	1,342	222	1,252	476	3,105	1,540
HAWAII	9,515	610	828	182	513	4,138	313	2,549	382
IDAHO	4,389	589	453	369	33	1,286	99	1,449	91
ILLINOIS	114,310	6,243	9,411	7,811	13,030	40,797	1,495	34,302	1,221
INDIANA	10,244	3,475	182	138	295	1,186	0	4,968	0
IOWA	17,757	4,417	1,848	2,439	448	2,255	418	5,932	0
KANSAS	20,666	1,930	1,284	3,407	1,350	4,570	443	7,682	0
KENTUCKY	19,292	2,626	2,187	2,076	1,055	5,640	91	5,617	0
LOUISIANA	42,751	4,135	3,044	1,549	2,260	24,840	125	6,393	405
MAINE	7,582	320	794	680	296	609	190	2,644	49
MARYLAND	38,354	888	2,077	3,533	563	15,917	3,604	7,309	6,471
MASSACHUSETTS	47,629	1,096	3,205	3,183	2,528	22,613	1,098	12,621	685
MICHIGAN	82,794	6,374	13,732	5,685	5,756	17,970	1,738	29,929	1,610
MINNESOTA	61,459	7,837	8,179	4,879	2,762	14,867	1,211	21,724	0
MISSISSIPPI	18,867	2,964	3,250	929	660	2,673	405	7,978	0
MISSOURI	51,299	5,442	7,796	3,366	1,311	12,451	1,841	19,092	0
NEBRASKA	12,693	1,945	1,599	779	134	4,541	6	3,641	48
NEVADA	2,441	63	2	85	54	1,046	92	1,099	0
NEW HAMPSHIRE	4,516	422	371	370	225	1,226	123	1,485	294
NEW JERSEY	29,602	417	4,537	3,717	1,191	6,941	2,717	10,082	0
NEW MEXICO	8,019	774	1,278	692	547	2,406	113	2,107	102
NEW YORK	0	0	0	0	0	0	0	0	0
NORTH CAROLINA	39,241	5,211	6,228	2,364	3,071	6,735	0	15,632	0
NORTH DAKOTA	6,839	1,180	469	1,032	280	1,831	315	1,732	0
OHIO	121,998	11,162	15,835	8,083	6,998	25,975	1,657	35,046	17,242
OKLAHOMA	17,983	2,893	2,088	1,816	598	3,674	824	5,973	125
OREGON	16,356	1,295	1,098	1,399	323	6,721	571	4,949	0
PENNSYLVANIA	74,675	2,935	4,630	4,889	2,413	27,941	3,592	20,152	8,123
RHODE ISLAND	6,765	287	397	529	362	3,417	392	1,391	0
SOUTH CAROLINA	22,939	2,212	1,921	1,809	964	5,657	880	9,496	0
SOUTH DAKOTA	6,159	856	1,045	710	182	801	0	2,296	269
TENNESSEE	26,894	1,499	3,058	2,162	1,533	6,918	881	10,819	24
TEXAS	113,956	9,018	23,208	11,789	7,716	25,068	4,248	31,102	1,815
UTAH	17,218	599	1,911	1,102	762	4,868	264	7,506	206
VERMONT	3,373	288	56	301	141	1,197	0	1,324	66
VIRGINIA	34,498	2,115	5,787	2,784	1,378	9,717	1,063	11,327	327
WASHINGTON	37,843	4,095	5,345	2,770	898	14,168	897	9,737	27
WEST VIRGINIA	14,088	669	1,231	1,888	520	4,612	597	4,440	131
WISCONSIN	19,727	2,576	1,805	1,536	853	4,497	912	3,708	3,840
WYOMING	1,722	302	299	221	34	451	24	391	0
TOTAL U.S.	1,740,054	133,897	192,447	134,578	93,541	554,337	52,531	518,851	59,872
AMERICAN SAMOA	387	15	2	9	0	297	7	57	0
NORTHERN MARIANAS	79	0	0	0	0	10	0	67	2
GUAM	255	8	15	0	0	50	0	163	19
PUERTO RICO	12,997	507	1,302	748	8	3,813	505	5,614	0
TRUST TERRITORY	699	94	0	0	0	27	0	387	191
OUTLYING AREAS	14,417	624	1,319	757	508	4,197	512	6,288	212
U.S. & OUTLYING AREAS	1,754,471	134,521	193,766	135,335	94,049	558,534	53,043	525,139	60,084

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

TABLE 10.6 -- PROGRAM LEAVERS,BY PROGRAM AREA AND BY STATE OR OUTLYING AREA: 1978-79

STATE OR OUTLYING AREA	TOTAL	AGRI-CULTURE	DISTRI-BUTION	HEALTH	OCCUP. HOME ECON	OFFICE OCCUP.	TECH-NICAL	TRADE & INDUS	OTHER NEC
ALABAMA	32,032	1,566	1,477	3,088	830	6,196	1,067	17,098	710
ALASKA	0	0	0	0	0	0	0	0	0
ARIZONA	0	0	0	0	0	0	0	0	0
ARKANSAS	6,436	1,234	355	345	98	1,370	2	3,032	0
CALIFORNIA	68,130	4,073	5,773	2,922	2,316	29,830	767	21,762	687
COLORADO	15,626	242	725	1,005	395	6,123	2,059	3,721	1,356
CONNECTICUT	3,301	54	115	238	114	1,207	87	1,566	0
DELAWARE	264	27	24	21	17	106	4	65	0
DISTRICT OF COLUMBIA	0	0	0	0	0	0	0	0	0
FLORIDA	2,[illegible]	107	448	105	96	605	42	989	521
GEORGIA	16,13[illegible]	57	685	1,696	450	3,802	1,395	6,084	3,167
HAWAII	4,206	70	658	100	0	1,311	131	1,656	0
IDAHO	3,231	422	365	100	64	1,195	64	965	56
ILLINOIS	25,618	1,054	1,864	2,039	2,607	8,009	1,523	7,950	572
INDIANA	2,087	301	66	22	157	41	0	1,500	0
IOWA	7,119	624	1,057	1,127	155	1,418	461	2,277	0
KANSAS	23,362	4,305	1,305	3,649	1,489	4,127	365	8,122	0
KENTUCKY	15,100	840	734	814	427	5,142	147	6,996	0
LOUISIANA	0	0	0	0	0	0	0	0	0
MAINE	2,000	140	229	120	66	101	197	1,120	27
MARYLAND	682	44	24	20	11	196	0	325	62
MASSACHUSETTS	1,957	216	147	259	75	0	175	1,046	39
MICHIGAN	24,714	901	3,174	2,094	1,595	6,209	2,040	8,452	249
MINNESOTA	0	0	0	0	0	0	0	0	0
MISSISSIPPI	7,053	915	651	401	194	1,123	405	3,364	0
MISSOURI	0	0	0	0	0	0	0	0	0
NEBRASKA	4,788	576	692	286	19	1,196	0	2,001	18
NEVADA	974	35	24	9	44	414	36	412	0
NEW HAMPSHIRE	1,592	95	105	109	148	285	74	688	88
NEW JERSEY	5,603	110	557	244	202	833	118	3,539	0
NEW MEXICO	5,518	263	736	242	171	2,040	287	1,703	76
NEW YORK	0	0	0	0	0	0	0	0	0
NORTH CAROLINA	2,209	401	176	90	169	181	0	1,192	0
NORTH DAKOTA	1,356	177	68	61	39	264	98	649	0
OHIO	19,362	1,153	1,263	1,873	1,362	3,237	1,218	5,329	3,927
OKLAHOMA	19,414	611	1,154	1,990	935	5,296	4,247	5,158	23
OREGON	18,403	1,663	1,148	292	608	8,992	244	5,456	0
PENNSYLVANIA	16,108	701	1,329	1,175	837	3,973	985	5,564	1,544
RHODE ISLAND	347	4	28	23	6	111	14	161	0
SOUTH CAROLINA	8,141	719	863	272	276	3,521	0	2,490	0
SOUTH DAKOTA	812	137	57	102	24	64	0	338	90
TENNESSEE	18,784	471	986	1,427	1,051	5,528	2,624	6,613	84
TEXAS	6,599	755	1,245	191	940	672	6	2,790	0
UTAH	7,362	146	656	296	294	2,701	74	3,103	92
VERMONT	1,018	114	8	48	42	409	0	381	16
VIRGINIA	5,906	512	455	314	342	1,809	0	2,425	49
WASHINGTON	18,076	889	1,159	437	1,876	3,758	1,142	8,701	114
WEST VIRGINIA	12,421	380	619	1,245	494	4,016	1,540	2,465	902
WISCONSIN	1,002	145	55	0	79	112	0	151	460
WYOMING	1,768	340	579	235	0	410	62	142	0
TOTAL U.S.	461,618	28,387	33,920	31,214	21,074	127,935	23,620	160,579	14,889
AMERICAN SAMOA	0	0	0	0	0	0	0	0	0
NORTHERN MARIANAS	36	3	0	0	0	16	0	17	0
GUAM	333	3	5	0	0	120	107	93	5
PUERTO RICO	834	12	306	45	0	223	159	89	0
TRUST TERRITORY	73	10	0	0	0	2	0	55	6
OUTLYING AREAS	1,276	28	311	45	0	361	266	254	11
U.S. & OUTLYING AREAS	462,894	28,415	34,231	31,259	21,074	128,296	23,886	160,833	14,900

SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS, VOCATIONAL EDUCATION DATA SYSTEM.

Table 10.7
Placement status of program completers[1/]: Fiscal years 1972, 1974, 1976, 1978

Placement status	FY 1972		FY 1974		FY 1976		FY 1978	
	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup
Completed program requirements[1/]	100.0		100.0		100.0		100.0	
Available for placement	58.9	100.0	58.5	100.0	55.1	100.0	55.2	100.0
Employed full-time in a field related to training	44.8	76.1	38.2	65.4	35.5	64.4	36.7	66.4
Other employment	9.3	15.8	14.6	24.9	13.9	25.3	14.0	25.4
Unemployed, but seeking work	4.8	8.1	5.7	9.7	5.7	10.3	4.5	8.2
Not available for placement	27.8	100.0	24.7	100.0	24.8	100.0	22.1	100.0
Continuing education at higher level	19.7	70.9	16.7	67.6	17.7	71.5	16.8	76.1
Other reasons	8.1	29.1	8.0	32.4	7.1	28.5	5.3	23.9
Status unknown	13.3		16.8		20.1		22.7	

[1/] Program completers include students who complete the vocational program requirements (with or without graduating) or who terminated their training prior to normal completion time in order to take full-time employment in the field for which they were training. Placement status refers to labor force status as of February of students who completed their training during the preceding fiscal year.

SOURCE: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Reports, 1972-78.

Table 10. 8
Placement status of program completers,[1/] by level of program: Fiscal year 1978

Placement status	All programs Percent of total	All programs Percent of subgroup	Secondary Percent of total	Secondary Percent of subgroup	Postsecondary Percent of total	Postsecondary Percent of subgroup	Adult (Preparatory) Percent of total	Adult (Preparatory) Percent of subgroup
Completed program requirements[1/]	100.0		100.0		100.0		100.0	
Available for placement	55.2	100.0	51.2	100.0	54.0	100.0	66.7	100.0
Employed full-time in a field related to training	36.7	66.4	30.4	59.3	40.3	74.7	49.0	73.5
Other employment	14.0	25.4	16.0	31.4	10.6	19.7	12.4	18.5
Unemployed, but seeking work	4.5	8.2	4.8	9.3	3.1	5.6	5.3	8.0
Not available for placement	22.1	100.0	31.5	100.0	11.1	100.0	9.5	100.0
Continuing education at higher level	16.8	76.1	25.4	80.7	6.7	60.7	5.3	55.5
Other reasons	5.3	23.9	6.1	19.3	4.4	39.3	4.2	44.5
Status unknown	22.7		17.3		34.9		23.8	

[1/] Program completers include students who completed the vocational program requirements (with or without graduating) or who terminated their training prior to normal completion time in order to take full-time employment in the field for which they were training. Placement status refers to labor force status as of February 1978 of students who completed their training during FY 1977.

SOURCE: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Report, 1978.

Table 10.9
Placement status of program completers[1], by instructional program area: Fiscal year 1978

Placement status	All programs		Agriculture		Distribution		Health	
	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup
Completed program requirements[1]	100.0		100.0		100.0		100.0	
Available for placement	55.2	100.0	56.5	100.0	55.1	100.0	61.5	100.0
Employed full-time in a field related to training	36.7	66.4	36.2	64.0	35.6	64.6	48.8	79.4
Other employment	14.0	25.4	16.6	29.4	15.2	27.6	9.0	14.6
Unemployed, but seeking work	4.5	8.2	3.7	6.6	4.3	7.8	3.7	6.0
Not available for placement	22.1	100.0	29.4	100.0	21.6	100.0	16.4	100.0
Continuing education at higher level	16.8	76.1	22.7	77.2	16.2	75.1	12.1	74.0
Other reasons	5.3	23.9	6.7	22.8	5.4	24.9	4.3	26.0
Status unknown	22.7		14.1		23.3		22.1	

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[1] Program completers include students who completed the vocational program requirements (with or without graduating) or who terminated their training prior to normal completion time in order to take full-time employment in the field for which they were training. Placement status refers to labor force status as of February 1978 of students who completed their training during FY 1977.

SOURCE: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Report, 1978.

Table 10. 9
Placement status of program completers[1/], by instructional program area: Fiscal year 1978 --continued

Placement status	Occ. home economics		Office occupations		Technical		Trade and industrial	
	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup
Completed program requirements[1/]	100.0		100.0		100.0		100.0	
Available for placement	51.6	100.0	48.4	100.0	49.5	100.0	61.8	100.0
Employed full-time in a field related to training	26.7	51.7	31.6	65.3	36.5	73.7	40.8	66.0
Other employment	17.6	34.2	12.2	25.2	10.2	20.6	16.3	26.5
Unemployed, but seeking work	7.3	14.1	4.6	9.5	2.8	5.7	4.7	7.5
Not available for placement	27.1	100.0	26.2	100.0	16.2	100.0	18.0	100.0
Continuing education at higher level	19.7	72.6	21.6	82.4	11.1	68.5	12.3	68.4
Other reasons	7.4	27.4	4.6	17.6	5.1	31.5	5.7	31.6
Status unknown	21.3		25.4		34.3		20.2	

[1/] Program completers include students who completed the vocational program requirements (with or without graduating) or who terminated their training prior to normal completion time in order to take full-time employment in the field for which they were training. Placement status refers to labor force status as of February 1978 of students who completed their training during FY 1977.

SOURCE: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Report, 1978.

Table 10.10
Placement status of program completers[1/], by special needs category: Fiscal year 1978

Placement status	All students		Disadvantaged		Handicapped	
	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup	Percent of total	Percent of subgroup
Completed program requirements[1/]	100.0		100.0		100.0	
Available for placement	55.2	100.0	55.7	100.0	56.2	100.0
Employed full-time in a field related to training	36.7	66.4	36.5	65.5	35.9	63.9
Other employment	14.0	25.4	13.1	23.5	13.2	23.4
Unemployed, but seeking work	4.5	8.2	6.1	11.0	7.1	12.7
Not available for placement	22.1	100.0	22.0	100.0	22.1	100.0
Continuing education at higher level	16.8	76.1	15.5	70.5	14.6	66.3
Other reasons	5.3	23.9	6.5	29.5	7.5	33.7
Status unknown	22.7		22.3		21.7	

[1/] Program completers include students who completed the vocational program requirements (with or without graduating) or who terminated their training prior to normal completion time in order to take full-time employment in the field for which they were training. Placement status refers to labor force status as of February 1978 of students who completed their training during FY 1977.

SOURCE: U.S. Department of Health, Education, and Welfare, Division of Vocational and Technical Education, Annual Report, 1978.

Table 10.11

Work status of students in noncollegiate postsecondary schools with occupational programs, by area of program: 1979

Work status	Total	Agriculture	Distribution	Health	Occupational home economics	Office occupations	Technical	Trade and industrial
	Area of current program							
	Percentage distribution							
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Currently working								
Total	47.89	67.52	61.25	44.65	32.84	42.54	68.81	47.59
Job for pay	44.78	47.13	58.63	42.50	32.84	40.96	62.52	43.80
Unpaid family worker	1.34	17.88	0	1.59	0	1.00	1.41	1.38
Self employed	1.77	2.52	2.62	.57	0	.57	4.87	2.42
Not Currently working								
Total	52.11	32.48	38.75	55.35	67.16	57.46	31.19	52.41
Looking for job	24.00	11.38	24.60	17.68	30.85	28.90	18.78	24.38
Not looking for job	28,11	21,10	14.16	37.67	36.32	28.55	12.41	28.03
Hours per week for those working								
Total	47.89	67.52	61.25	44.65	32.84	42.54	68.81	47.59
Less than 15 hours	8.23	13,09	8.63	16.89	2.80	6.32	6.35	6.29
15-34 hours	19,85	21.30	21.73	19.43	16.36	21.32	32.03	16.21
35 hours or more	19.81	33.13	30.89	8.33	13.68	14.89	30.43	25.09

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations.

Table 10.12
Work plans of students in noncollegiate postsecondary schools with occupational programs: 1979

Plans	Area of current program							
	Total	Agriculture	Distribution	Health	Occupational home economics	Office occupations	Technical	Trade
				Percentage distribution				
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Continue at current job	9.60	18.98	25.16	4.95	7.59	7.50	13.16	11.25
Look for job in field	82.67	75.93	66.29	89.18	88.12	83.29	80.40	81.00
Look for job not in field	1.66	.86	1.83	.83	.12	1.97	1.03	1.95
Enter military service	.33	0	0	.50	0	.18	.10	.44
Don't plan to work	1.30	.76	.84	1.32	.75	1.69	1.27	1.05
Don't know	4.42	3.47	5.89	3.10	3.42	5.36	4.04	4.32
Other	.02	0	0	.12	0	0	0	0

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations.

Table 10.13
Activities of young adults three years after high school, by high school program, sex, and race: October 1975

High school program, sex and race	Working for pay	Graduate school	Academic course	Vocational-technical	Active duty	Home-maker	Temp. not work.	Other
	Percent							
Total								
General	70.80	1.28	20.71	3.86	6.16	20.91	7.85	3.38
Academic	62.08	3.50	55.40	3.71	3.73	11.57	5.29	2.49
Vocational-technical	75.46	.77	9.31	4.22	5.16	27.41	8.11	3.32
Male								
General	77.37	.89	21.89	4.59	10.37	.90	8.39	2.69
Academic	62.07	3.18	57.55	3.93	6.36	.43	5.29	2.33
Vocational-technical	83.55	.66	10.38	5.29	10.90	.99	8.23	3.32
Female								
General	63.61	1.68	19.52	3.07	1.30	43.00	7.30	4.15
Academic	62.10	3.81	53.05	3.43	.76	24.00	5.33	2.65
Vocational-technical	69.62	.86	8.51	3.48	.93	46.79	7.96	3.24
Black								
General	68.94	1.88	21.63	5.32	9.40	18.91	12.09	3.67
Academic	60.16	2.92	47.73	5.55	6.19	11.40	11.86	2.41
Vocational-technical	68.37	1.40	13.26	7.08	5.92	20.45	16.05	3.32
White								
General	70.88	1.25	20.68	3.59	5.82	21.32	7.22	3.39
Academic	61.93	3.46	56.32	3.45	3.46	11.72	4.78	2.51
Vocational-technical	76.58	.63	8.71	3.99	5.03	28.58	6.83	3.37

NOTE: Details do not add to 100.0 because respondents could identify more than one activity.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-Up Questionnaire Data, March 1978.

Table 10.14
Activities of young adults four and one-half years after high school, by high school program, sex and race: October 1976

High school program, sex and race	Working for pay	Graduate school	Academic course	Vocational-technical	Active duty	Home-maker	Temp. not work.	Other
	Percent							
Total								
General	72.42	1.89	13.41	3.93	4.20	23.50	9.04	4.56
Academic	71.32	9.13	26.24	3.94	3.60	14.62	9.19	4.22
Vocational-technical	74.54	.98	7.46	4.66	3.63	30.52	8.84	3.89
Male								
General	80.69	1.73	15.38	4.46	7.09	1.28	8.86	4.51
Academic	71.58	10.16	29.79	4.28	5.98	.77	8.88	4.33
Vocational-technical	84.27	1.02	7.28	5.69	7.39	1.13	9.70	3.75
Female								
General	63.40	2.09	11.26	3.35	1.04	48.09	8.99	4.55
Academic	71.15	7.93	22.35	3.51	.96	30.07	9.44	4.08
Vocational-technical	67.63	.97	7.68	3.97	.86	51.98	8.12	3.92
Black								
General	68.18	2.18	13.62	5.47	6.00	20.39	16.35	4.04
Academic	67.41	7.78	26.06	3.86	6.38	12.84	13.64	3.51
Vocational-technical	71.25	1.36	11.48	5.38	5.18	21.28	14.31	3.96
White								
General	73.31	1.90	13.09	3.66	4.08	23.99	7.82	4.77
Academic	71.91	9.36	25.82	3.85	3.33	14.86	8.69	4.19
Vocational-technical	75.29	.97	6.83	4.66	3.33	32.14	7.76	4.05

NOTE: Details do not add to 100.0 because respondents could identify more than one activity.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, NLS, Tabular Summary of the Third Follow-up Questionnaire Data, March 1978.

Table 10.15
Percent of young adults earning any certificate, license, diploma, or degree of any kind in the four years since leaving high school, by high school program and sex: October 1976

High school program and sex	Certificate or other award earned	No certificate or other award
Total		
General	31.98	68.02
Academic	52.38	47.62
Vocational-technical	27.71	72.29
Male		
General	32.54	67.46
Academic	49.92	50.08
Vocational-technical	32.59	67.41
Female		
General	31.32	68.68
Academic	55.22	44.78
Vocational-technical	24.10	75.90

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-up Questionnaire Data, March 1978.

Table 10.16

Highest level of education of young adults four and one-half years out of high school, by high school program, sex, and race: October 1976

High school program, sex and race	Total	Finish high school	Less than 2-year vocational	More than 2-year vocational	Less than 2-year college	More than 2-year college	Completed college
				Percentage distribution			
Total							
General	100.0	48.99	12.27	3.52	14.72	13.71	6.80
Academic	100.0	15.59	5.84	2.91	15.28	29.81	30.56
Vocational	100.0	58.51	15.59	6.65	11.08	6.45	1.71
Male							
General	100.0	49.82	10.47	4.39	14.96	15.10	5.26
Academic	100.0	15.58	5.10	2.91	16.03	32.15	28.25
Vocational	100.0	56.16	13.62	10.01	11.53	7.20	1.47
Female							
General	100.0	47.89	14.27	2.57	14.57	12.29	8.42
Academic	100.0	15.53	6.69	2.93	14.40	27.27	33.18
Vocational	100.0	60.23	17.06	4.20	10.80	5.80	1.90
Black							
General	100.0	45.79	16.87	3.16	14.15	13.65	6.38
Academic	100.0	21.46	10.27	2.73	16.64	27.44	21.45
Vocational	100.0	53.19	18.66	3.32	13.11	9.03	2.69
White							
General	100.0	48.65	11.92	3.55	14.91	13.79	7.18
Academic	100.0	14.83	5.48	2.93	15.06	29.75	31.95
Vocational	100.0	58.46	15.46	7.54	10.91	5.92	1.90

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-up Questionnaire Data, March 1978.

Table 10.17
Job status of young adults four and one-half years after high school, by high school program, sex, and race: October 1976

High school program, sex and race	Percentage distribution during first week of October				
	Total	Working full-time	Working part-time	Working; laid off	Not working
Total					
General	100.0	63.93	10.86	1.41	23.80
Academic	100.0	54.42	19.09	1.10	25.38
Vocational	100.0	68.44	7.69	1.39	22.48
Male					
General	100.0	75.07	9.52	1.33	14.09
Academic	100.0	57.46	17.72	1.02	23.81
Vocational	100.0	82.63	4.57	1.67	11.13
Female					
General	100.0	51.82	12.34	1.48	34.36
Academic	100.0	51.17	20.65	1.20	26.97
Vocational	100.0	58.19	9.94	1.20	30.67
Black					
General	100.0	59.45	11.45	1.67	27.42
Academic	100.0	55.22	15.93	1.67	27.18
Vocational	100.0	65.62	9.25	1.07	24.07
White					
General	100.0	64.88	10.86	1.37	22.89
Academic	100.0	54.61	19.40	1.01	24.98
Vocational	100.0	69.17	7.26	1.40	22.17

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-Up Questionnaire Data, March 1978.

Table 10.18
Percent of young adults not working four years after high school because of health problems or physical handicap, by high school program and sex: October 1976

High school program and sex	Percent
Total	
General	6.07
Academic	3.38
Vocational-technical	7.39
Male	
General	5.72
Academic	2.64
Vocational-technical	6.96
Female	
General	6.26
Academic	4.16
Vocational-technical	7.50

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-up Questionnaire Data, March 1978.

Table 10.19

Jobs held by young adults four and one-half years after high school, by high school program and sex: October 1976

Job	High school program								
	General			Academic			Vocational-technical		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
				Percentage distribution					
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Professional	10.60	8.66	13.47	26.43	21.59	32.01	7.09	7.20	7.03
Administrative	7.03	8.63	4.59	8.29	11.23	4.86	5.08	6.91	3.42
Sales	5.65	5.07	6.29	6.84	6.64	7.11	4.40	3.61	5.15
Clerical	23.02	10.51	40.98	24.99	14.06	37.69	34.33	7.78	59.35
Craftsman	14.28	22.94	1.91	8.31	14.50	1.14	15.87	31.06	1.63
Operative	13.63	14.67	12.20	5.34	7.94	2.35	13.09	18.66	7.88
Transportation	4.25	6.95	.39	2.31	4.17	.17	3.86	7.59	.40
Laborers	5.55	8.54	1.22	3.66	6.09	.86	4.11	7.47	.99
Farmers	.54	.92	.00	.40	.66	.11	.59	1.13	.00
Farm labor	1.18	1.91	.15	.62	1.03	.15	.89	1.64	.17
Service	12.96	9.60	17.89	11.09	9.86	12.46	9.45	5.36	13.09
Household	.31	.00	.77	.37	.00	.81	.37	.00	.72
Not reported	1.00	1.61	.14	1.34	2.23	.29	.87	1.59	.17

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-Up Questionnaire Data, March 1978.

Table 10.20

Jobs held by young adults four and one-half years after high school, by high school program and race: October 1976

Job	High school program								
	General			Academic			Vocational-technical		
	Total	Black	White	Total	Black	White	Total	Black	White
	Percentage distribution								
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Professional	10.60	10.81	11.10	28.43	19.11	27.08	7.09	6.47	7.48
Administrative	7.03	2.48	7.65	6.29	3.81	8.53	5.08	2.35	5.61
Sales	5.65	4.47	5.75	6.84	5.64	6.97	4.40	2.76	4.51
Clerical	23.02	25.72	22.02	24.99	33.75	24.10	34.33	35.38	34.44
Craftsman	14.28	9.15	15.06	8.31	4.90	8.64	15.87	9.91	16.48
Operative	13.63	18.59	13.04	5.34	9.96	4.98	13.09	16.71	12.42
Transportation	4.25	2.53	4.27	2.31	1.71	2.40	3.86	2.96	3.80
Laborers	5.55	6.79	5.48	3.66	2.16	3.93	4.11	4.44	4.04
Farmers	.54	.00	.67	.40	.00	.43	.59	.00	.68
Farm labor	1.18	.43	1.39	.62	.00	.58	.89	.15	.96
Service	12.96	17.24	12.27	11.09	15.72	10.85	9.45	17.00	8.49
Household	.31	.38	.34	.37	.08	.38	.37	.22	.34
Not reported	1.00	1.41	.97	1.34	3.15	1.11	.87	1.65	.76

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-Up Questionnaire Data, March 1978.

Table 10.21
Educational attainment of employed young people four and one-half years out of high school, by high school program and by vocational area of current job: October 1976

High school program and current vocational area	Educational attainment						
	Total	Finish high school	Less than 2 years vocational	More than 2 years vocational	Less than 2 years college	More than 2 years college	College degree
	Percentage distribution						
General							
Agriculture	100.0	55.5	12.3	6.2	13.0	11.6	2.9
Office occupations	100.0	47.1	13.8	3.1	18.3	13.6	4.1
Distribution	100.0	69.9	15.7	1.2	6.0	7.2	6.0
Health	100.0	31.3	23.1	5.6	15.9	20.5	3.6
Home economics	100.0	63.4	9.4	1.7	10.4	13.4	1.7
Trade and industrial	100.0	65.5	13.3	3.6	10.9	5.6	1.1
Academic							
Agriculture	100.0	23.8	4.1	2.7	10.2	35.4	23.8
Office occupations	100.0	20.0	6.0	3.0	18.3	29.2	23.6
Distribution	100.0	13.6	1.6	3.2	15.2	26.4	40.0
Health	100.0	6.0	7.4	12.2	9.9	32.3	32.1
Home economics	100.0	21.5	2.8	1.0	15.8	36.9	22.1
Trade and industrial	100.0	26.4	8.0	5.9	22.0	25.8	12.0
Vocational-technical							
Agriculture	100.0	71.9	7.8	4.7	5.5	7.8	2.3
Office occupations	100.0	62.4	15.3	2.9	12.1	6.1	1.2
Distribution	100.0	55.8	13.5	7.7	7.7	9.6	5.8
Health	100.0	47.4	22.7	7.2	10.3	9.3	3.1
Home economics	100.0	73.0	10.1	2.8	5.6	7.3	1.1
Trade and industrial	100.0	70.4	11.2	8.0	6.5	4.0	0.0

NOTE: Details may not add to totals because of rounding.

SOURCE: United States Department of Education, National Center for Education Statistics, National Longitudinal Study, unpublished tabulations.

Table 10.22
Satisfaction with education and training during the last year of school attended of young adults four years out of high school, by high school program, sex, and race: October 1976

High school program, sex, and race	Total	Very satisfied	Some satisfaction	Neutral	Some dis-satisfaction	Very dis-satisfied
			COURSE CURRICULUM			
Total						
General	100.0	18.05	44.56	18.06	14.79	4.54
Academic	100.0	23.14	47.74	9.71	15.81	3.60
Vocational	100.0	21.32	45.72	17.57	11.65	3.73
Male						
General	100.0	16.04	44.68	20.01	14.79	4.48
Academic	100.0	21.68	47.14	11.60	15.57	4.02
Vocational	100.0	17.71	46.37	20.31	11.57	4.04
Female						
General	100.0	20.28	44.39	15.88	14.87	4.59
Academic	100.0	24.79	48.51	7.57	16.10	3.04
Vocational	100.0	23.97	45.32	15.35	11.82	3.55
Black						
General	100.0	17.84	49.65	17.39	10.96	4.16
Academic	100.0	22.73	48.29	10.99	14.22	3.78
Vocational	100.0	22.00	47.31	17.77	10.63	2.29
White						
General	100.0	18.24	44.27	17.48	15.41	4.59
Academic	100.0	23.17	48.25	9.42	15.74	3.42
Vocational	100.0	21.40	45.66	16.81	12.25	3.88
			COUNSELING OR JOB PLACEMENT			
Total						
General	100.0	11.21	24.14	34.73	17.44	12.48
Academic	100.0	9.75	21.59	36.20	19.47	13.00
Vocational	100.0	15.07	27.38	30.17	16.70	10.67
Male						
General	100.0	9.96	22.30	36.15	18.36	13.23
Academic	100.0	8.99	20.20	39.08	19.45	12.29
Vocational	100.0	13.64	27.07	30.99	17.77	10.53
Female						
General	100.0	12.58	26.25	33.27	16.43	11.47
Academic	100.0	10.58	23.11	33.04	19.54	13.73
Vocational	100.0	16.04	27.60	29.63	16.01	10.72
Black						
General	100.0	12.48	29.47	30.11	14.64	13.30
Academic	100.0	10.52	28.47	30.19	17.90	12.93
Vocational	100.0	14.84	33.36	22.16	20.41	9.24
White						
General	100.0	10.96	23.12	35.60	17.77	12.54
Academic	100.0	9.52	20.99	36.84	19.73	12.93
Vocational	100.0	15.31	26.38	31.38	15.92	11.01

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-Up Questionnaire Data, March 1978,

Table 10.23
Job satisfaction of young adults four years after high school, by sex and high school program: October 1976

Sex and program	Total	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied
			Percentage distribution		
			JOB AS A WHOLE		
Male					
General	100.00	20.77	59.22	15.40	4.61
Academic	100.00	24.86	54.50	16.53	4.11
Vocational	100.00	24.67	58.42	12.16	4.75
Female					
General	100.00	25.03	57.82	12.84	4.31
Academic	100.00	26.84	53.26	15.79	4.11
Vocational	100.00	28.35	55.44	12.33	3.88
			JOB'S IMPORTANCE AND CHALLENGE		
Male					
General	100.00	20.55	51.94	19.95	7.56
Academic	100.00	24.01	46.21	21.51	8.27
Vocational	100.00	22.58	56.88	15.20	5.34
Female					
General	100.00	19.67	54.03	19.71	6.59
Academic	100.00	25.24	45.46	20.23	9.08
Vocational	100.00	22.68	52.65	18.53	6.14
			OPPORTUNITY TO USE PAST TRAINING AND EDUCATION		
Male					
General	100.00	14.80	49.24	24.37	11.59
Academic	100.00	21.09	42.26	22.60	14.05
Vocational	100.00	21.00	48.55	21.55	8.89
Female					
General	100.00	20.57	50.27	19.96	9.20
Academic	100.00	28.87	39.20	18.25	13.67
Vocational	100.00	23.29	51.05	17.97	7.69

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-up Questionnaire Data, March 1978.

Table 10.24
Job satisfaction of young adults four years after high school, by race and high school program: October 1976

Race and high school program	Total	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied
		Percentage distribution			
		JOB AS A WHOLE			
Black					
General	100.00	14.00	62.82	17.39	5.79
Academic	100.00	16.82	57.01	19.99	6.19
Vocational	100.00	16.61	61.59	14.82	6.98
White					
General	100.00	23.47	58.13	14.16	4.24
Academic	100.00	26.41	53.53	16.10	3.96
Vocational	100.00	28.09	56.09	12.02	3.81
		JOB'S IMPORTANCE AND CHALLENGE			
Black					
General	100.00	13.36	56.64	20.87	9.14
Academic	100.00	18.59	50.15	22.83	8.42
Vocational	100.00	18.44	56.55	17.13	7.88
White					
General	100.00	21.01	52.23	20.04	6.72
Academic	100.00	24.80	45.58	20.95	8.67
Vocational	100.00	23.30	54.40	16.87	5.43
		OPPORTUNITY TO USE PAST TRAINING AND EDUCATION			
Black					
General	100.00	14.44	48.95	25.11	11.50
Academic	100.00	22.44	39.96	23.45	14.15
Vocational	100.00	18.38	47.01	25.42	9.19
White					
General	100.00	17.64	49.46	22.35	10.55
Academic	100.00	24.86	40.78	20.54	13.82
Vocational	100.00	22.96	49.73	19.17	8.13

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-up Questionnaire Data, March 1978.

Table 10.25
Occupation of employed persons 16 years old and over, by years of school completed: March 1978

Occupational group	Total employed (thousands)	Years of school completed									Median school years completed
			Elementary			High school		College			
		Total	Less than 5 years	5 to 7	8	1 to 3	4	1 to 3	4	5 or more	
		Percentage distribution									
Both Sexes											
All occupational groups	91,964	100.0	1.4	3.3	4.8	15.7	39.7	17.4	10.3	7.4	12.6
Professional and technical	14,303	100.0	.1	.2	.3	1.6	14.3	19.0	30.7	33.8	16.5
Managers and administrators	10,182	100.0	.4	1.2	2.7	8.0	35.0	22.4	19.2	11.2	13.4
Sales	5,908	100.0	.3	1.0	2.5	13.5	38.1	24.2	16.1	4.2	12.9
Clerical	16,556	100.0	.1	.6	1.5	9.7	56.1	23.7	6.6	1.7	12.7
Craft	11,720	100.0	1.6	4.5	7.0	17.8	49.5	15.8	3.1	.7	12.4
Operatives	10,511	100.0	3.3	7.5	9.3	26.4	44.3	7.7	1.4	.3	12.1
Transportation	3,409	100.0	1.9	5.7	9.2	23.2	46.4	11.2	2.0	.6	12.2
Nonfarm laborers	4,314	100.0	4.0	6.9	7.8	30.9	37.0	11.5	1.5	.4	12.0
Private household workers	1,142	100.0	6.2	11.5	10.9	37.1	24.5	8.3	.9	.5	10.8
Service workers	11,484	100.0	1.9	4.9	7.0	27.1	39.8	15.5	3.0	.6	12.2
Farm workers	2,434	100.0	7.3	9.3	11.6	19.1	37.3	9.2	4.5	1.7	12.1

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Educational Attainment of Workers — Some Trends from 1973 to 1978, Special Labor Force Report 225.

Table 10.26
Labor force entrance of college graduates, by major occupational group:
March 1962 to March 1969 and March 1969 to March 1976

Occupational group	1962 to 1969		1969 to 1976	
	Number (in thousands)	Percentage distribution	Number (in thousands)	Percentage distribution
Total	4,017	100.0	8,096	100.0
Professional and technical	2,915	72.6	3,751	46.1
Managers and administrators	686	17.1	1,498	18.4
Sales	117	3.9	680	8.4
Clerical	121	3.0	858	10.5
Craft	99	2.5	256	3.1
Operatives	21	.5	166	2.0
Nonfarm laborers	4	.1	80	1.0
Service	21	.5	373	4.6
Farmworkers	12	.2	94	1.2
Unemployed	4	.1	250	4.7

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Educational Attainment of Workers, March 1962, 1969, and 1976, Special Labor Force Reports Nos. 30, 125, and 193.

Table 10.27
Field of training for persons 18 years old and over with vocational school experience, by labor force status, current occupation, and sex: October 1976

(Numbers in thousands, Civilian noninstitutional population)

Labor force status, current occupation, and sex	Total with vocational school experience 1/	Percent	Field of vocational training						
			Agri-culture	Sales	Health	Home economics	Office	Technical	Trades
Total men 2/	3,108	100.0	2.4	11.5	6.0	0.8	14.1	17.8	47.4
In civilian labor force	2,900	100.0	2.4	11.7	5.9	0.8	14.6	17.7	47.0
Employed	2,715	100.0	2.5	11.9	6.2	0.8	14.8	18.1	45.8
Professional, technical, and kindred workers	547	100.0	0.4	3.8	19.4	0.5	18.8	38.9	18.3
Managers and administrators except farm	331	100.0	2.1	27.5	2.4	1.8	27.2	17.2	21.8
Sales workers	224	100.0	1.3	63.8	0.9	1.3	12.5	5.8	14.3
Clerical and kindred workers	170	100.0	--	11.8	1.8	--	31.8	20.7	33.5
Craft and kindred workers	671	100.0	1.2	2.8	2.8	0.3	6.0	13.1	73.9
Transport equipment operatives	85	100.0	7.1	7.1	1.2	--	3.5	12.9	67.1
Operatives except transport	257	100.0	1.2	4.3	0.8	--	14.8	16.0	63.0
Service workers except private household	245	100.0	1.6	3.3	9.8	2.9	9.8	8.6	64.1
Farm workers	63	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)
Laborers except farm	126	100.0	5.6	4.0	1.6	--	15.9	8.7	65.1
Not in civilian labor force	208	100.0	1.9	9.6	7.7	1.4	7.2	19.3	52.9
Total women 2/	2,849	100.0	1.4	9.4	19.9	5.9	36.5	10.5	16.4
In civilian labor force	2,073	100.0	1.3	10.7	19.7	5.2	37.8	12.1	13.4
Employed	1,840	100.0	1.3	11.7	20.3	5.5	35.2	12.7	13.3
Professional, technical, and kindred workers	444	100.0	1.1	4.7	34.9	3.4	14.9	32.0	9.2
Managers and administrators except farm	132	100.0	3.8	23.5	7.6	15.2	31.8	9.1	9.1
Sales workers	157	100.0	--	61.8	3.2	1.9	19.7	3.2	10.2
Clerical and kindred workers	664	100.0	--	9.2	8.7	3.9	61.4	20.6	8.3
Craft and kindred workers	18	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)
Transport equipment operatives	11	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)
Operatives except transport	56	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)
Service workers except private household	333	100.0	2.4	0.9	40.8	9.3	17.4	2.4	26.4
Farm workers	18	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)
Laborers except farm	11	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)
Not in civilian labor force	776	100.0	1.8	6.1	20.6	7.9	33.0	6.2	24.5

-- Represents zero or rounds to zero.

B Base less than 75,000.

1/ Excludes all persons with vocational field not elsewhere classified and not reported.

2/ Includes those who attended vocational school in October 1976 or during the preceding 12 months.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Vocational School Experience: October 1976, Series P-20, No. 343, September 1979.

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Table 10.28
Occupational goals of high school seniors, by high school program: 1972

Occupational goal	High school program		
	Academic	General	Vocational
	Weighted percentage of students		
Total	100.0	100.0	100.0
Clerical such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent	5.6	14.1	35.6
Craftsman such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter	3.2	10.5	14.6
Farmer, farm manager	1.1	2.2	1.8
Homemaker or housewife	1.8	4.7	3.8
Laborer such as construction worker, car washer, sanitary worker, farm laborer	1.4	3.8	3.5
Manager, administrator, such as sales manager, office manager, school administrator, buyer, restaurant manager, government official	3.5	3.0	2.3
Military such as career officer, enlisted man or woman in the Armed Forces	1.9	3.4	2.4
Operative such as meat cutter; assembler; machine operator; welder; taxicab, bus, or truck driver; gas station attendant	1.2	3.0	3.9
Professional such as accountant, artist, clergyman, dentist, physician, registered nurse, engineer, lawyer, librarian, teacher, writer, scientist, social worker, actor, actress	65.8	32.2	13.5
Proprietor or owner such as owner of a small business, contractor, restaurant owner	1.5	2.7	1.5
Protective service such as detective, policeman or guard, sheriff, fireman	1.7	3.5	1.7
Sales such as salesman, sales clerk, advertising or insurance agent, real estate broker	2.4	3.8	3.5
Service such as barber, beautician, practical nurse, private household worker, janitor, waiter	2.4	6.2	5.6
Technical such as draftsman, medical or dental technician, computer programmer	6.6	7.0	6.4

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Student Questionnaire and Test Results by Sex, High School Program, Ethnic Category, and Father's Education, 1975.

Table 10.29
Job expectations at age 30 of young adults four and one-half years out of high school, by high school program and race: October 1976

Occupational expectation	High school program								
	General			Academic			Vocational-technical		
	Total	Black	White	Total	Black	White	Total	Black	White
	Percentage distribution								
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Clerical	9.03	15.30	8.01	5.06	9.10	4.75	17.78	23.16	17.21
Craftsman	11.20	5.73	11.94	4.71	3.86	4.78	12.47	9.57	12.85
Farmer	2.26	.40	2.61	1.45	.25	1.54	2.17	.41	2.44
Homemaker	14.35	6.90	15.52	7.23	2.91	7.73	18.97	8.51	20.67
Laborer	3.64	2.39	3.57	.99	1.03	.93	3.33	2.63	3.15
Administrator	7.89	8.47	7.94	12.07	11.63	12.20	6.73	6.89	6.64
Military	1.25	2.42	1.08	1.67	2.73	1.60	1.45	1.88	1.45
Operative	6.53	6.34	6.70	1.64	3.39	1.45	5.85	4.21	5.76
Professional[1]	15.54	21.03	14.85	27.61	28.21	27.63	10.70	16.20	9.83
Professional[2]	4.47	4.52	4.30	14.64	15.31	14.32	1.72	2.90	1.70
Proprietor	6.08	4.43	6.24	4.12	3.01	4.21	4.93	4.37	4.98
Protective Service	2.24	1.02	2.32	1.52	1.46	1.56	1.97	1.29	1.93
Sales	2.57	1.84	2.77	2.30	1.32	2.26	1.75	1.58	1.84
School teacher	4.38	5.22	4.32	8.54	6.46	8.79	1.95	3.09	1.76
Service	2.74	5.62	2.28	1.01	2.01	.88	2.90	5.71	2.53
Technical	4.19	6.32	4.05	4.59	6.45	4.53	3.79	6.08	3.58
Not working	1.65	2.05	1.49	.85	.87	.84	1.54	1.53	1.67

[1] Professional such as accountant, artist, registered nurse, engineer, librarian, writer, social worker, actor, actress, athlete, politician, but not including public school teacher.

[2] Professional such as clergyman, dentist, physician, lawyer, scientist, college teacher.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-Up Questionnaire Data, March 1978.

Table 10.30

Job expectations at age 30 of young adults four and one-half years out of high school, by high school program and sex: October 1976

Occupational Expectation	General			Academic			Vocational-technical		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
	Percentage distribution								
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Clerical	9.03	1.90	16.81	5.06	1.22	9.33	17.78	1.46	29.73
Craftsman	11.20	20.40	.90	4.71	8.55	.49	12.47	28.35	.87
Farmer	2.26	3.42	.99	1.45	2.20	.62	2.17	4.33	.55
Homemaker	14.35	.01	30.29	7.23	.10	15.09	18.97	.24	32.69
Laborer	3.64	6.46	.56	.99	1.77	.13	3.33	7.25	.47
Administrator	7.89	10.69	4.74	12.07	16.05	7.67	6.73	10.19	4.26
Military	1.25	2.11	.30	1.67	2.88	.33	1.45	3.15	.20
Operative	6.53	9.66	3.18	1.64	2.67	.48	5.85	11.45	1.84
Professional[1]	15.54	13.98	17.26	27.61	23.87	31.68	10.70	8.55	12.11
Professional[2]	4.47	6.13	2.64	14.64	18.04	10.90	1.72	2.38	1.26
Proprietor	6.08	8.89	2.94	4.12	6.38	1.64	4.93	9.32	1.74
Protective Service	2.24	3.80	.54	1.52	2.60	.33	1.97	4.00	.49
Sales	2.57	2.59	2.57	2.30	3.10	1.42	1.75	1.57	1.85
School teacher	4.38	2.51	6.52	8.54	4.57	12.96	1.95	.93	2.60
Service	2.74	1.18	4.41	1.01	.43	1.61	2.90	1.00	4.29
Technical	4.19	5.17	3.14	4.59	5.14	3.98	3.79	5.07	2.91
Not working	1.65	1.11	2.20	.85	.44	1.31	1.54	.74	2.14

High school program

[1] Professional such as accountant, artist, registered nurse, engineer, librarian, writer, social worker, actor, actress, athlete, politician, but not including public school teacher.

[2] Professional such as clergyman, dentist, physician, lawyer, scientist, college teacher.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, National Longitudinal Study, Tabular Summary of the Third Follow-Up Questionnaire Data, March 1978.

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